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Via Electronic and US Mail

August 9, 2016

Joseph A. Gowers
Remedial Project Manager
Emergency and Remedial Response Division
USEPA Region II
290 Broadway, 19th Floor
New York, New York 10007-1866

Re: Ringwood Mines/Landfill Superfund Site
May/June 2016 Groundwater, Mine Water, and Surface Water Sampling

Dear Mr. Gowers:

On May 19, 20, 23-31, and June 1, 2016 Cornerstone Engineering Group, LLC, on behalf of Ford Motor Company (Ford), conducted groundwater, mine water, and surface water sampling to further characterize water quality down gradient of the Peters Mine Pit (PMP) and within the O'Connor Disposal Area (OCDA). The sampling and analyses were performed in accordance with the USEPA approved January 25, 2016 Work Plan for installation and sampling of the additional PMP Area wells. Sampling locations and parameters were also consistent with prior sampling events with the addition of new wells constructed in late 2015 and early 2016, which include OB-31, OB-32, OB-33, RW-14S, RW-14D, RW-15S, RW-15D and RW-16, as well as select OCDA overburden monitoring wells and surface water sample locations.

Specifically, the May/June sampling event included the following scope of work:

- Groundwater sampling from the PMP Area and OCDA monitoring wells OB-11R, OB-14A, OB-14B, OB-16, OB-17, OB-18, OB-19, OB-20A, OB-20B, OB-24, OB-27, OB-31, OB-32, OB-33, RW-3D, RW-3DS, RW-3DD, RW-5, RW-5A, RW-6, RW-6A, RW-11S, RW-11D, RW-14S, RW-14D, RW-15S, RW-15D, RW-16, and SC-1.
- Mine water sampling from the 50', 180', and 230' depth intervals within the PMP Air Shaft mine structure.
- Surface water sampling at locations in Mine Brook, Northern Brook, and Peters Mine Brook including PMB-01, PMB-02, NOB-02, SW-SP-01, SW-03, SW-04, MRB-02, MRB-03, and Park Brook locations PAB-00, PAB-01, PAB-01A, PAB-03, PAB-04 as well as the PMP Pond, the SR-3 Seeps and the SR-3 Pond.

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- Quality control samples including field blanks, blind duplicates (collected at locations OB-11R, RW-3D, and SW-04), and trip blanks.

The sampling locations are shown on the attached figure excerpted from Attachment 1 of the Remedial Investigation (RI) Report for the PMP Area, prepared by Arcadis, July 2012.

Groundwater samples were collected using low-flow sampling methodology. Field sampling data sheets are attached for reference (Attachment A).

Samples collected by Cornerstone were submitted under chain of custody to Test America Laboratories for analysis of Target Compound List (TCL) Volatile Organic Compounds (VOCs) plus the next 15 tentatively identified compounds (TICs) by Method 8260, and 1,4-dioxane via Method 8270 SIM. Two split samples were also sent under chain-of-custody to Accutest Laboratories for analysis of 1,4-dioxane using Method 8270 SIM, for comparison to the 1,4-dioxane results reported by Test America.

Split or duplicate samples were collected at each location by Excel Environmental Resources, Inc. (Excel Environmental), on behalf of the Borough of Ringwood, and sent to Alpha Analytical under chain of custody for the same suite of analysis with one adjustment. Specifically, Alpha Analytical used the same analytical methods with the addition of isotope dilution for the 1,4-dioxane analyses, as discussed further below.

The data for samples submitted to Test America and SGS Accutest by Cornerstone are presented and discussed below followed by presentation and discussion of the split sample results submitted to Alpha Laboratories by Excel Environmental.

Tables prepared to summarize the data and attached to this letter report include:

Tables 1A - 1G - Field Data Summary Tables
Tables 2A - 2B - Groundwater Analytical Results - May/June 2016
Tables 3A - 3B - Mine Water Analytical Results - May/June 2016
Tables 4A - 4B - Surface Water Analytical Results - May/June 2016
Table 5 - Data Validation Qualifiers
Tables 6A - 6B - Summary of Historical and Current Results for Benzene, 1,4-Dioxane, Chloroethane, Arsenic and Lead
Excel Tables 1 and 2 - Excel Environmental Split Sample Results

Figures include:

Figure 1 - Sampling Location Plan
Figure 2 - Surface Water Benzene, 1,4-Dioxane and Chloroethane Concentrations (ug/L)
Figure 3 - Overburden Benzene, 1,4-Dioxane and Chloroethane Concentrations (ug/L) in the Peters Mine Pit
Figure 4 - Bedrock Groundwater and Mine Water Benzene, 1,4-Dioxane and Chloroethane Concentrations (ug/L) in the Peters Mine Pit
Figure 5 - Benzene, 1,4-Dioxane and Chloroethane Concentrations (ug/L) in the Former OCDA

Test America and SGS Accutest Results

Samples collected by Cornerstone and analyzed by Test America and SGS Accutest for the May/June 2016 sampling event are summarized in the tables and figures identified above. Analytical data are organized by providing two summary tables each for groundwater, mine water, and surface water. Each set of tables includes a table of detected VOC (including 1,4-dioxane) parameters (i.e., only those locations and parameters for which there were detected constituents) and a table summarizing the complete VOC data set (i.e., all locations and parameters). Tables of historic and current (as applicable) benzene, 1,4-dioxane, chloroethane, arsenic and lead concentrations are also provided for consistency with Table 13 from the Site-Related Groundwater RI Report, prepared by Arcadis, dated January 2015 for ease of comparison of historical and current data for these parameters. Figures are provided illustrating the concentrations of benzene, chloroethane and 1,4-dioxane reported in groundwater and mine water within the Peters Mine Pit (PMP) and down gradient, and within the surface water system at the locations indicated above. Note that Figures 2 through 5 also include the split sample 1,4-dioxane results as reported by Alpha Analytical and discussed further below.

Full laboratory reports showing the analytical results and chain of custody documentation for the samples are attached for reference in Attachment B. Data validation of the analytical results was performed by Cadena, and the data validation reports are also enclosed (Attachment C).

The Test America and SGS Accutest results of the May/June 2016 sampling event are summarized as follows:

- Concentrations of VOCs in groundwater, including benzene, were at levels consistent with historical concentrations. Benzene was detected in groundwater within the range of non-detect to 5.7 ug/L (RW-6A) compared to the New Jersey Groundwater Quality Standard (NJGWQS) of 1 ug/L. Chloroethane was detected in the range of non-detect to 55 ug/L (OB-27) by comparison to the New Jersey Interim Generic Groundwater Quality Criterion (NJIGGWQC) of 5 ug/L. As an additional point of comparison, the USEPA Regional Screening Level (RSL) for chloroethane in tap water is 21,000 ug/L. No other Method 8260 VOCs were detected above NJGWQS. VOC TICS were also reported at certain well locations at concentrations similar to historical data. One VOC TIC, 1-methylnaphthalene, was reported at 5.9(J) ug/L in OB-27, slightly higher than its corresponding NJIGGWQC of 5 ug/L.
- Several Method 8260 VOCs were detected within the mine water samples collected from the PMP Air shaft. Only benzene was detected above the NJGWQS of 1 ug/L in the 180' (6.4 ug/L) and 230' (25 ug/L) intervals. Only chloroethane was detected above the NJIGGWQC of 5 ug/L in the 180' (48 ug/L) and 230' (23 ug/L) intervals. TICs were not identified in mine water samples.
- Method 8260 VOCs were non-detect in the majority of surface water samples. Benzene was detected above its New Jersey Surface Water Quality Standard (NJSWQS) of 0.15 ug/L in only the SR-3 Pond (0.32J ug/L), SR-3 Seep 2 (1.7 ug/L) and SW-PAB-01 (0.35J ug/L).

ug/L). The only other VOC detected above its NJSWQS was vinyl chloride at 0.22 ug/L compared to the NJSWQS of 0.082 ug/L, in the SR-3 Seep 2 sample).

- The two samples split between Test America and SGS Accutest for analysis of 1,4-dioxane by 8270 SIM compared well.
- The results for 1,4-dioxane in groundwater ranged from non-detect to 16D ug/L (RW-11D) by comparison to the NJISGWQC of 0.4 ug/L
- The results for 1,4-dioxane in mine water ranged from non-detect to 15 ug/L (230' interval) by comparison to the NJISGWQC of 0.4 ug/L.
- The results for 1,4-dioxane in surface water ranged from non-detect to 1.9 ug/L (SR-3 Pond), with a total of seven detections in surface water with the majority less than 1 ug/L. There is no NJSWQS for 1,4-dioxane for comparison. As an additional point of comparison, the Michigan Department of Environmental Quality has developed an ecological screening value for 1,4-dioxane of 20,000 ug/L.

Alpha Analytical Results (Split Samples)

Samples collected by Cornerstone and split with Excel Environmental for analysis by Alpha Analytical are summarized in Excel Environmental Tables 1 and 2 (included following Tables 1 through 6 discussed above). In addition, the Alpha Analytical 1,4-dioxane results have also been posted to Figures 2 through 5, referenced above, to facilitate direct comparison with the Test America data. Laboratory data reports for the split samples analyzed by Alpha Analytical are provided in Attachment D.

Comparison of the split sample results (Alpha Analytical) to those reported by Test America may be summarized as follows:

- VOC results from the split samples analyzed by Alpha Analytical compared well with the results reported by Test America. There were no notable or consistent differences between the two data sets.
- The 1,4-dioxane results reported by Alpha Analytical were consistently higher than those reported by Test America and SGS Accutest. Alpha Analytical analyzed 1,4-dioxane using Method 8270 SIM with the optional addition of isotope dilution, while Test America and SGS Accutest used 8270 SIM without isotope dilution. The addition of isotope dilution allowed for the concentration of 1,4-dioxane to be calculated based upon the percent recovery of a surrogate, deuterated 1,4-dioxane compound (1,4-dioxane-d₈) that behaves the same as the native compound. The use of isotope dilution with 8270 SIM accounts for the higher concentrations reported by Alpha Analytical. Additional details are provided within the Technical Memorandum prepared by ddms and included with the data validation reports in Attachment C. Based on these data, Ford will direct the laboratory to use isotope dilution with 8270 SIM for future analysis of 1,4-dioxane.

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- The Alpha Analytical results for 1,4-dioxane in groundwater ranged from non-detect to 54.6 ug/L (RW-11D). While the concentrations of 1,4-dioxane reported by Alpha Analytical were higher than those reported by Test America, the relative distribution of the results in groundwater was similar.
- The Alpha Analytical results for 1,4-dioxane in mine water ranged from 18.2 to 144 ug/L (230' interval), with the Alpha Analytical results higher than those reported by Test America.
- The Alpha Analytical results for 1,4-dioxane in surface water ranged from non-detect to 6.1 ug/L (SR-3 Seep 2). As noted above, while the concentrations of 1,4-dioxane reported by Alpha Analytical were higher than those reported by Test America, the relative distribution of the results in surface water was similar, with detections from the two laboratory data sets in the same surface water locations.
- Based on these data, and as noted above, Ford will direct the laboratory to use isotope dilution with 8270 SIM for future analysis of 1,4-dioxane.

The data collected for the May/June 2016 sampling event will be incorporated into an addendum to the RI Report consistent with the results of prior sampling as called for in the USEPA letter dated June 24, 2015. As the agency is aware, the next scheduled sampling event of Site monitoring wells and surface water locations is the 2016 Annual Monitoring program which will be initiated on Monday, August 15, 2016.

Please contact us if you have questions or comments on the enclosed submittal.

Sincerely,

CORNERSTONE ENGINEERING GROUP, LLC



Gary J. DiPippo, Professional Engineer.

NJ Lic. # 24GE02646100

Region Vice President

Enclosure

cc:	B. Bussa, Ford T. Green, Ford OGC J. Lagrotteria, LeClairRyan D. Laguzza, LeClairRyan K. Petrone, NJDEP	L. Dodge, Excel Environmental Resources, Inc. R. Harwood, Excel Environmental Resources, Inc. S. Heck, Borough of Ringwood W. Monahan, Sedita, Campisano & Campisano C. Coslett, de maximis Greg Albright, Arcadis
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TABLES
MAY/JUNE 2016 SAMPLING EVENT

Table 1A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-1	5 - 31'	9/26/2006	4.70	143.5	5.59	14.42	0.059	4.98
		4/6/2007	2.00	109.3	6.12	7.02	0.075	8.87
		4/30/2008	2.70	196.9	5.57	9.04	0.033	7.52
		9/8/2008	0.50	364.3	5.66	14.51	0.083	6.00
		7/2/2009	1.10	309.3	5.60	12.57	0.051	5.84
		10/22/2009	0.37	124.4	5.52	13.08	0.054	4.66
		5/26/2010	1.21	211.6	5.69	10.63	0.036	6.67
		5/17/2011	6.30	39.0	6.82	10.27	0.169	3.12
		4/26/2012	3.20	237.0	5.73	9.37	0.048	5.93
		11/5/2013	NS	NS	NS	NS	NS	NS
OB-2	8 - 42'	8/10/2015	NS	NS	NS	NS	NS	NS
		10/2/2006	2.30	161.6	5.91	11.22	0.110	6.28
		4/6/2007	1.00	60.2	6.08	10.12	0.120	6.28
		4/28/2008	0.00	18.5	5.95	9.82	0.990	9.36
		9/17/2008	1.32	152.9	5.13	14.31	0.129	8.41
		6/30/2009	0.65	183.1	5.91	10.20	0.099	7.47
		10/20/2009	0.00	181.0	5.99	12.75	0.096	7.81
		5/25/2010	1.52	153.1	5.77	12.93	0.065	8.53
		5/16/2011	1.46	152.1	5.81	10.83	0.145	6.19
		4/19/2012	0.00	276.0	5.65	13.07	0.157	7.42
		11/18/2013	0.00	223.0	5.96	12.57	0.188	4.66
		9/15/2014	0.00	205.0	5.46	13.24	0.172	6.14
		8/12/2015	16.40	224.9	6.05	14.70	0.124	7.00
OB-3	9 - 24'	9/28/2006	18.20	172.3	5.76	13.55	0.088	6.05
		4/3/2007	2.50	163.0	5.81	7.76	0.096	8.60
		4/28/2008	21.00	170.1	5.97	9.11	0.072	6.47
		9/9/2008	9.86	236.2	5.63	13.69	0.252	4.08
		6/30/2009	0.40	115.0	6.21	10.43	0.110	4.09
		10/20/2009	22.00	-79.7	6.31	13.42	0.077	0.31
		5/25/2010	30.00	61.0	6.34	11.11	0.072	2.36
		5/18/2011	36.70	158.0	6.17	11.59	0.188	4.78
		4/13/2012	2.60	202.0	6.65	9.65	0.145	8.64
		11/5/2013	25.50	95.0	6.74	12.29	0.140	3.27
		9/8/2014	3.80	96.0	6.64	13.57	0.177	4.23
		8/10/2015	28.60	84.1	6.37	13.80	0.749	5.13
OB-4	28 - 61'	9/29/2006	7.90	-23.8	6.49	13.37	0.877	0.13
		4/6/2007	6.00	-142.2	7.18	12.06	0.966	0.29
		4/28/2008	0.00	-52.0	6.49	12.40	0.689	0.25
		9/10/2008	2.14	-32.4	6.87	13.79	0.377	0.25
		7/1/2009	9.56	-80.0	6.73	12.66	0.338	0.06
		10/20/2009	11.40	-25.7	6.81	14.61	0.305	0.44
		5/26/2010	5.35	-41.9	5.77	13.81	0.790	0.19
		5/17/2011	0.00	70.0	5.24	12.28	0.961	1.12
		4/27/2012	16.20	-59.0	6.65	11.80	0.902	1.25
		11/13/2013	2.10	-115.0	6.72	12.72	1.170	1.01
		9/15/2014	0.00	-99.0	6.92	18.35	1.020	0.65
		8/10/2015	0.00	-83.0	6.71	13.72	1.050	3.70

Table 1A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-5	18 - 63'	10/2/2006	6.20	-65.4	6.47	14.02	0.914	0.13
		4/4/2007	23.00	-69.3	6.47	9.42	0.966	0.30
		4/28/2008	2.80	-87.5	6.64	10.33	0.918	0.26
		9/9/2008	0.80	-53.2	6.37	13.39	1.006	0.38
		7/1/2009	18.70	-112.1	7.01	10.83	0.557	0.09
		10/21/2009	16.20	-91.0	6.87	11.84	0.479	0.55
		5/26/2010	5.25	-170.6	6.70	13.75	0.659	0.18
		5/17/2011	0.00	-175.0	7.17	10.95	0.998	0.32
		4/19/2012	0.00	-177.0	7.40	15.76	0.861	2.12
		11/11/2013	10.20	-172.0	7.32	12.39	0.705	2.28
		9/8/2014	12.10	-119.0	7.08	15.10	0.864	0.50
		8/10/2015	0.00	-136.0	6.72	13.20	0.798	5.00
OB-6	10 - 36'	9/26/2006	9.00	-3.0	6.11	18.00	0.460	0.22
		4/5/2007	4.00	66.5	6.60	6.47	0.376	0.22
		5/1/2008	0.92	-23.8	6.46	8.85	0.386	0.35
		9/8/2008	1.10	163.0	4.07	19.16	0.559	0.37
		7/1/2009	0.54	-18.5	6.44	15.68	0.289	0.28
		10/19/2009	NR	NR	NR	NR	NR	NR
		11/15/2013	2.90	98.0	6.37	14.13	0.204	1.08
		9/8/2014	0.00	60.0	6.49	14.23	0.219	1.07
		8/6/2015	16.60	23.0	6.32	13.02	0.231	0.00
OB-7	14 - 42'	9/28/2006	9.20	-72.5	6.79	13.31	0.652	0.13
		4/5/2007	19.00	2.1	6.80	8.76	0.591	0.83
		4/29/2008	23.00	-68.4	6.82	9.69	0.675	0.62
		9/10/2008	2.49	-30.6	6.96	12.74	0.500	0.32
		7/1/2009	4.11	-17.8	6.56	11.90	0.480	0.31
		10/21/2009	7.82	-111.8	7.18	12.42	0.406	0.19
		5/25/2010	14.80	-66.2	6.74	12.41	0.349	0.24
		5/17/2011	8.90	-101.0	6.99	10.38	0.585	1.93
		4/19/2012	0.00	-50.0	7.16	11.90	0.625	1.50
		11/12/2013	25.20	-40.0	6.97	11.23	0.668	1.67
		9/5/2014	24.60	-39.0	6.98	13.30	0.622	6.65
		8/24/2015	17.80	-26.0	6.91	12.82	0.539	0.00
OB-10	10 - 20'	10/2/2006	0.00	-38.5	6.62	14.97	0.158	0.19
		4/3/2007	3.00	9.7	6.58	4.90	0.097	0.25
		4/29/2008	1.70	192.8	5.01	10.88	0.120	3.72
		9/10/2008	0.22	603.0	5.39	17.82	0.126	0.84
		7/1/2009	6.61	-36.1	6.45	15.73	0.120	0.27
		10/21/2009	4.01	57.1	6.15	11.96	0.096	0.53
		5/26/2010	0.62	170.1	6.40	11.71	0.099	2.39
		5/17/2011	38.40	205.0	6.10	10.53	0.141	3.17
		4/20/2012	0.00	114.0	6.68	13.66	0.131	3.02
		11/14/2013	1.40	175.0	6.47	13.61	0.130	6.99
		9/9/2014	0.00	224.0	6.34	11.59	0.140	6.91
		8/14/2015	6.50	136.0	6.28	13.10	0.108	2.26

Table 1A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-11R	25 - 40'	6/11/2010	35.80	-92.5	6.63	11.51	0.340	0.29
		5/18/2011	56.30	60.0	5.57	10.27	0.570	0.60
		4/26/2012	2.00	-109.0	6.64	10.10	0.489	1.21
		11/8/2013	36.00	-99.0	6.73	10.82	0.570	0.30
		9/11/2014	0.00	-104.0	6.66	13.30	0.538	1.87
		4/21/2015	17.80	-99.0	6.56	10.07	0.583	0.00
		6/1/2015	12.40	-111.0	6.56	10.37	0.520	16.14
		8/6/2015	13.80	-100.0	6.94	12.28	0.536	2.55
		5/25/2016	22.30	-121.4	6.61	12.70	0.436	0.77
		9/28/2006	1.20	210.4	5.61	13.03	0.084	6.00
OB-12	9 - 40'	4/3/2007	0.20	186.5	5.41	8.30	0.086	8.40
		4/28/2008	NR	36.8	5.58	8.69	0.072	6.59
		9/9/2008	0.00	194.2	5.77	11.87	0.065	6.95
		6/30/2009	1.79	161.1	5.84	11.22	0.064	4.97
		10/20/2009	0.00	189.9	5.62	12.79	0.073	1.79
		5/25/2010	0.42	209.6	5.31	11.53	0.052	4.98
		5/17/2011	30.00	192.9	5.39	10.68	0.052	4.20
		4/19/2012	0.00	278.0	5.85	11.36	0.087	5.45
		11/18/2013	0.20	203.0	5.89	14.49	0.107	9.78
		9/15/2014	0.00	424.0	5.94	10.63	0.107	5.10
		8/10/2015	65.70	239.6	5.73	11.60	0.917	5.73
OB-13	8 - 60'	10/3/2006	2.60	136.0	5.86	12.24	0.103	6.76
		4/3/2007	0.70	195.4	5.55	10.83	0.079	9.22
		4/28/2008	0.40	184.6	5.93	9.67	0.065	9.61
		9/10/2008	0.10	403.5	5.99	11.99	0.152	7.04
		7/1/2009	0.00	204.0	5.70	11.30	0.063	8.71
		10/21/2009	0.00	60.6	6.10	11.53	0.850	6.48
		5/25/2010	2.38	225.7	5.69	10.90	0.044	8.92
		5/17/2011	0.00	249.0	5.50	10.58	0.072	10.78
		4/20/2012	0.00	142.0	6.30	11.49	0.104	10.07
		11/13/2013	5.00	-73.0	5.57	11.46	0.111	1.55
		9/8/2014	1.50	138.0	6.21	13.65	0.089	2.20
		8/10/2015	40.48	146.4	5.99	11.60	0.75	2.92
OB-14A	4 - 14'	9/27/2006	4.82	-62.0	6.35	16.23	0.962	0.69
		4/9/2007	5.00	-98.3	6.30	12.90	0.938	0.41
		4/30/2008	8.80	-79.6	6.21	13.96	0.964	0.35
		9/11/2008	1.39	-20.3	5.64	15.27	0.860	0.89
		7/6/2009	1.10	-27.3	5.49	13.97	0.715	0.44
		10/23/2009	10.55	-20.3	6.13	13.80	0.676	0.73
		5/28/2010	0.93	78.5	6.10	12.59	0.693	0.35
		5/19/2011	63.70	-71.0	6.35	12.33	0.781	5.34
		4/18/2012	0.50	-55.0	6.86	14.30	0.610	1.98
		11/6/2013	0.00	2.0	6.76	13.14	0.891	2.02
		9/11/2014	0.00	-76.0	6.26	14.36	0.805	1.14
		8/13/2015	14.70	-58.0	6.08	17.00	0.701	0.05
OB-14B	25 - 35'	5/23/2016	18.50	-10.4	3.78	13.70	0.268	0.41
		9/27/2006	1.80	-30.8	6.75	14.83	0.871	0.23
		4/9/2007	3.00	-12.9	6.69	14.00	0.954	0.28
		4/30/2008	14.70	6.8	6.76	14.01	0.852	0.24
		9/11/2008	12.30	-4.6	6.30	14.29	0.807	0.37
		7/6/2009	15.90	44.2	6.65	14.59	0.762	0.45
		10/20/2009	1.20	16.4	6.93	13.16	0.646	0.24
		5/28/2010	1.78	-17.9	6.62	13.61	0.709	0.31
		5/19/2011	29.10	-7.0	6.69	13.97	0.911	0.47
		4/18/2012	9.70	-30.0	7.07	13.45	0.950	1.20
		11/6/2013	16.80	-2.0	7.14	12.69	0.803	0.70
		9/11/2014	21.20	-83.0	6.81	14.13	0.797	0.97
		8/13/2015	0.00	-99.0	6.85	13.25	0.739	1.13
		5/23/2016	3.03	38.0	4.07	13.81	0.225	0.36

Table 1A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-15B	25 - 35'	10/3/2006	38.90	34.8	8.21	13.03	0.199	0.16
		4/12/2007	147.00	171.1	7.87	5.38	0.212	0.32
		5/2/2008	11.00	32.1	7.89	9.91	0.186	0.28
		9/16/2008	6.10	157.6	7.60	16.03	0.171	0.92
		7/2/2009	13.30	-53.3	7.03	15.77	0.158	0.12
		10/26/2009	13.80	NR	7.82	13.48	0.135	1.86
		6/3/2010	3.95	76.6	6.18	20.12	0.158	0.63
		5/23/2011	2.00	77.0	7.65	13.59	0.204	1.53
		4/24/2012	0.00	135.0	7.38	14.84	0.196	0.88
		11/20/2013	44.50	90.0	7.62	9.57	0.171	2.06
		9/5/2014	29.10	-8.0	7.93	14.66	0.202	0.91
		8/24/2015	44.80	-13.9	8.09	14.80	0.173	0.01
		9/27/2006	0.80	-44.7	6.59	15.02	0.955	0.82
		4/10/2007	2.80	-20.6	6.63	8.65	0.985	0.32
OB-16	5 - 15'	5/1/2008	0.00	-66.1	6.39	10.50	0.914	0.21
		9/11/2008	4.27	-41.6	6.21	15.43	0.960	0.38
		7/8/2009	1.07	-33.4	6.69	13.21	0.795	0.47
		10/23/2009	1.67	-39.8	6.36	12.87	0.762	0.92
		5/27/2010	6.85	-92.7	6.46	12.07	0.768	0.16
		5/19/2011	15.80	77.0	5.39	12.02	0.997	0.73
		4/17/2012	25.70	-66.0	6.87	14.80	1.020	1.76
		11/6/2013	0.00	-64.0	6.79	13.42	1.000	2.40
		9/10/2014	0.00	-87.0	6.66	14.70	0.944	1.30
		8/13/2015	11.30	-61.0	6.45	16.00	0.915	1.56
		5/23/2016	7.62	24.3	4.00	11.80	0.719	0.20
		9/27/2006	6.20	18.2	6.39	15.01	0.612	0.66
		4/10/2007	9.00	114.1	6.44	6.45	0.656	0.50
OB-17	3 - 13'	5/1/2008	0.80	45.4	6.19	9.44	0.575	0.57
		9/11/2008	1.64	368.6	6.01	15.92	0.181	1.04
		7/8/2009	10.00	17.0	6.52	12.81	0.571	0.61
		10/23/2009	12.30	37.3	6.49	12.59	0.564	0.33
		5/27/2010	7.45	4.8	6.37	11.18	0.521	0.18
		5/19/2011	0.00	35.0	6.12	11.85	0.192	0.91
		4/17/2012	21.70	-12.0	6.76	10.20	0.797	1.56
		11/6/2013	15.30	89.0	6.54	11.59	0.739	1.70
		9/3/2014	90.00	-26.0	6.91	16.30	0.777	1.83
		8/13/2015	45.00	-8.0	6.42	15.45	0.647	0.00
		5/24/2016	22.10	-54.1	4.90	10.70	0.522	0.52
		9/26/2006	0.36	57.6	6.74	14.45	0.262	2.99
		4/10/2007	1.00	150.3	6.88	6.65	0.357	2.39
OB-18	10 - 20'	5/1/2008	0.41	53.2	6.67	8.90	0.296	1.70
		9/11/2008	3.59	195.4	5.31	13.87	0.276	2.48
		7/8/2009	17.70	216.7	6.65	11.84	0.241	0.65
		10/23/2009	3.57	38.3	6.94	12.30	0.244	3.24
		5/27/2010	3.53	106.2	6.94	10.19	0.231	2.45
		5/16/2011	0.00	204.0	5.84	8.69	0.605	0.92
		4/17/2012	0.20	87.0	7.13	10.84	0.365	2.21
		11/6/2013	0.00	170.0	6.80	13.92	0.356	1.98
		9/3/2014	1.90	192.0	6.71	12.32	0.352	0.59
		8/13/2015	22.80	118.0	6.72	11.68	0.33	0.66
		5/23/2016	3.09	230.2	6.93	10.80	0.249	1.14

Table 1A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2016)

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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-19	5 - 20'	10/3/2006	10.10	-61.3	6.36	14.32	0.254	0.13
		4/9/2007	2.00	-40.7	6.22	6.23	0.160	0.18
		10/15/2007	NR	-52.7	6.60	NR	NR	6.22
		4/29/2008	0.00	-66.2	6.05	9.30	0.100	0.19
		9/12/2008	6.32	-16.5	5.91	14.15	0.193	0.28
		7/7/2009	12.00	-58.2	5.63	11.60	0.215	0.27
		10/27/2009	2.70	-87.1	6.35	12.43	0.157	0.19
		6/11/2010	5.85	-62.7	6.27	10.67	0.100	0.18
		5/20/2011	0.00	-23.0	6.16	10.70	0.190	1.67
		5/25/2012	0.00	-50.0	6.23	10.14	0.161	0.80
		11/11/2013	49.80	-38.0	6.34	12.25	0.127	2.58
		9/4/2014	1.70	-89.0	5.81	14.48	0.217	3.44
		8/5/2015	11.40	-86.0	6.37	17.10	0.138	6.00
		5/25/2016	2.88	185.8	6.30	11.00	0.187	6.45
OB-20A	5 - 20'	10/4/2006	98.70	28.9	5.61	14.65	0.388	0.17
		4/3/2007	21.00	-86.9	6.27	11.61	0.467	0.30
		10/11/2007	NR	-75.1	6.50	NR	NR	1.20
		4/29/2008	34.00	-44.2	6.26	6.64	0.221	0.33
		9/15/2008	32.10	20.1	4.93	13.49	0.234	3.05
		7/9/2009	9.90	-13.0	6.00	10.19	0.200	0.26
		10/28/2009	79.50	-24.4	5.96	12.96	0.217	0.73
		6/2/2010	5.74	-87.0	6.16	11.82	0.244	0.23
		5/18/2011	19.70	110.0	5.09	8.19	0.227	0.60
		4/27/2012	32.70	-26.0	6.15	10.22	0.208	0.78
		11/8/2013	41.00	-82.0	6.35	11.74	0.285	0.38
		9/5/2014	49.80	-141.0	5.78	12.98	0.299	0.85
		4/21/2015	12.80	-40.0	6.25	10.30	0.26	0.00
		6/1/2015	5.00	-10.0	6.38	11.00	0.213	0.55
		8/5/2015	80.40	-83.0	6.30	11.47	0.251	0.00
		5/26/2016	1.70	-105.8	6.62	11.80	0.182	0.29
OB-20B	24 - 34'	10/4/2006	197.00	-57.0	6.35	11.95	0.530	0.14
		4/5/2007	36.00	-50.4	6.27	10.28	0.527	0.20
		10/11/2007	NR	-51.7	6.34	NR	NR	0.35
		4/29/2008	20.00	-42.7	6.14	8.94	0.299	0.27
		9/15/2008	22.90	89.6	4.03	11.00	0.374	0.00
		7/9/2009	12.90	19.7	6.21	9.93	0.304	0.28
		10/28/2009	12.90	19.7	6.21	9.93	0.304	0.28
		6/2/2010	10.40	-29.4	6.93	12.40	0.215	0.43
		5/18/2011	28.20	-63.0	6.45	9.45	0.355	1.42
		4/27/2012	11.90	-42.0	6.46	13.30	0.385	1.04
		11/8/2013	20.70	-65.0	6.16	11.22	0.520	4.11
		9/5/2014	24.60	-71.0	6.38	13.54	0.436	4.47
		4/21/2015	25.10	-41.0	6.15	11.70	0.555	0.00
		6/1/2015	27.90	-51.0	6.10	10.05	0.484	0.00
		8/5/2015	25.30	-67.0	5.64	12.50	0.478	0.00
		5/26/2016	19.70	-38.9	6.31	11.90	0.383	0.31
OB-21	6 - 21'	10/5/2006	74.70	132.9	5.96	15.66	0.123	0.64
		4/9/2007	816.00	32.6	6.42	7.38	0.101	5.83
		10/15/2007	NR	239.8	5.19	NR	NR	3.15
		4/29/2008	60.00	48.1	6.17	8.95	0.088	5.43
		9/12/2008	160.00	485.0	5.68	12.74	0.107	6.65
		7/7/2009	173.00	147.4	5.58	11.96	0.08	5.62
		10/27/2009	29.00	-12.8	6.46	12.30	0.082	3.43
		6/1/2010	205.00	219.3	5.92	12.60	0.008	4.17
		5/18/2011	39.95	244.0	6.01	11.25	0.110	8.49
		4/24/2012	52.40	238.0	5.72	9.37	0.113	1.99
		11/7/2013	49.80	201.0	6.48	12.67	0.124	1.14
		9/4/2014	NR	195.0	8.14	14.50	0.121	2.48
		4/20/2015	108.00	201.0	5.94	9.42	0.105	0.00
		8/6/2015	202.00	76.0	6.28	12.54	0.113	2.51

Table 1A
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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-22	10 - 20'	11/29/2006	NR	-129.0	6.30	11.82	0.423	5.10
		4/4/2007	NR	32.6	6.42	7.94	0.313	5.83
		5/1/2008	63.00	225.3	5.99	9.87	0.345	8.57
		9/12/2008	NR	NR	NR	NR	NR	NR
		7/8/2009	222.00	347.4	6.12	15.12	0.266	4.47
		10/26/2009	NR	NR	NR	NR	NR	NR
		5/28/2010	21.50	203.3	5.83	13.50	0.237	6.41
		5/19/2011	98.00	98.2	6.38	16.69	0.536	4.99
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
OB-23	10 - 20'	8/18/2015	NS	Ns	NS	NS	NS	NS
		11/28/2006	8.24	-62.7	6.44	14.70	1.118	0.27
		4/12/2007	NR	NR	NR	NR	NR	NR
		5/2/2008	8.70	-60.0	6.62	12.75	2.4	0.46
		9/12/2008	NR	NR	NR	NR	NR	NR
		7/8/2009	19.80	-35.3	6.34	14.92	0.969	1.02
		10/26/2009	NR	NR	NR	NR	NR	NR
		5/28/2010	4.57	-25.7	5.69	14.43	0.897	0.42
		5/19/2011	0.00	-85.0	6.28	12.70	1.18	0.69
		11/5/2013	NS	NS	NS	NS	NS	NS
OB-24	5 - 15'	9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS
		11/28/2006	3.97	143.5	7.09	11.64	0.701	0.25
		4/11/2007	5.10	90.0	7.24	7.76	0.840	0.25
		4/30/2008	5.30	45.5	7.07	9.08	0.780	0.27
		9/11/2008	33.90	244.4	5.28	15.49	0.738	0.87
		7/8/2009	9.80	401.4	6.57	13.32	0.588	0.35
		10/26/2009	6.40	117.4	6.91	14.03	0.574	0.4
		5/28/2010	5.75	131.5	6.92	10.95	0.477	0.27
		5/19/2011	30.90	85.0	7.05	11.73	0.774	0.99
OB-25	10 - 20'	4/18/2012	26.60	175.0	7.39	9.63	0.812	1.07
		11/6/2013	20.00	189.0	7.37	12.33	0.773	0.69
		9/3/2014	0.00	128.0	7.61	13.45	0.82	10.40
		8/13/2015	27.20	-35.0	7.27	13.85	0.688	3.55
		5/24/2016	38.70	-97.1	5.68	10.60	0.626	0.66
		11/28/2006	3.97	143.5	7.09	11.64	0.701	0.25
		4/12/2007	NR	NR	NR	NR	NR	NR
		4/29/2008	550.00	204.3	7.13	8.70	0.623	10.49
		9/18/2008	300.00	119.7	6.75	16.67	0.587	7.42
		7/6/2009	284.00	411.8	6.26	14.43	0.484	7.20
OB-26	9 - 24'	10/26/2009	450.00	201.7	6.91	13.04	0.387	6.25
		6/1/2010	797.00	166.5	6.60	13.69	0.539	4.27
		5/20/2011	0.00	170.0	6.95	13.94	0.505	8.09
		4/20/2012	24.10	135.0	7.39	12.10	0.652	6.84
		11/11/2013	0.00	74.0	6.96	6.97	0.422	3.17
		9/9/2014	44.10	182.0	6.68	16.17	0.563	2.20
		8/6/2015	0.00	117.0	6.87	14.57	0.449	4.32
		5/9/2008	9.00	167.0	5.45	8.82	0.065	6.03
OB-26	9 - 24'	9/16/2008	9.96	305.7	5.49	15.99	0.135	3.86
		7/2/2009	8.70	146.4	6.12	14.09	0.079	1.77
		10/27/2009	16.40	156.9	5.57	14.60	0.066	2.28
		5/26/2010	10.30	232.4	4.63	12.90	0.052	3.95
		5/17/2011	0.00	192.0	5.96	11.01	0.077	8.12
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS

Table 1A
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Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
OB-27	24.5 - 39.5'	6/2/2010	4.39	-75.9	6.29	11.51	0.300	0.31
		5/18/2011	40.20	-106.0	6.76	11.46	0.368	0.79
		4/25/2012	48.90	41.0	5.32	10.33	0.379	0.28
		11/11/2013	23.10	-94.0	6.38	11.12	0.440	0.37
		9/10/2014	44.70	-102.0	6.66	21.73	0.307	0.68
		4/21/2015	107.00	-82.0	6.50	11.11	0.440	0.00
		6/1/2015	27.20	-97.0	6.53	10.34	0.391	2.65
		8/6/2015	23.00	-87.0	6.93	13.48	0.362	0.65
		5/25/2016	17.90	-147.5	6.70	11.00	0.288	1.95
OB-28	3 - 18'	5/27/2010	4.39	-75.9	6.29	11.51	0.300	0.31
		5/19/2011	20.60	27.0	6.65	11.41	0.939	0.48
		4/17/2012	29.60	91.0	7.02	12.20	1.010	1.14
		11/6/2013	39.10	75.0	6.88	12.69	1.030	2.10
		9/10/2014	46.50	28.0	6.76	14.81	0.918	2.44
		8/13/2015	43.00	33.0	6.69	13.07	0.892	0.00
		5/23/2016	15.80	167.6	7.01	10.90	0.709	0.20
OB-29	18 - 35'	5/11/2012	46.50	123.0	6.77	12.82	0.157	1.30
		11/14/2013	49.30	161.0	6.52	12.43	0.135	7.59
		9/9/2014	47.60	228.0	5.95	12.85	0.132	3.81
		8/12/2015	29.40	37.0	6.49	12.53	0.111	9.50
OB-30A	8 - 18'	5/10/2012	0.00	49.0	6.64	11.21	0.391	8.37
		11/5/2013	NS	NS	NS	NS	NS	NS
		9/5/2014	NS	NS	NS	NS	NS	NS
		8/18/2015	NS	NS	NS	NS	NS	NS
OB-30B	21 - 36'	5/11/2012	0.00	86.0	6.57	11.72	0.390	1.03
		11/7/2013	0.00	103.0	6.28	12.49	0.313	1.59
		9/4/2014	31.40	66.0	6.44	15.48	0.326	3.56
		8/6/2015	50.30	234.0	5.26	11.34	0.283	0.00
OB-30C	40 - 50'	5/9/2012	38.90	-27.0	8.07	13.38	0.425	0.89
		11/7/2013	49.80	79.0	9.03	12.15	0.410	2.22
		9/4/2014	30.20	125.0	8.20	15.76	0.386	3.71
		8/6/2015	0.00	-130.0	8.52	12.26	0.366	8.51
OB-31	23 - 33'	5/25/2016	13.70	-85.7	6.93	13.10	0.199	0.33
OB-32	10 - 20'	5/25/2016	3.20	-97.0	6.74	11.90	0.286	0.37
OB-33	66-76'	5/24/2016	82.00	71.5	6.30	11.90	0.005	2.86
SC-1	64.4 - 70.9'	10/5/2006	0.40	-313.3	7.45	13.30	0.759	0.06
		4/11/2007	11.70	-18.7	5.97	8.62	0.304	0.26
		10/16/2007	NR	-42.3	6.05	NR	NR	0.26
		4/30/2008	0.00	-74.2	5.99	6.18	0.215	0.10
		9/6/2008	3.40	-73.7	5.23	10.88	0.235	1.05
		7/9/2009	14.10	49.1	5.97	14.03	0.198	0.42
		10/28/2009	20.80	-53.8	5.22	14.39	0.154	0.53
		6/2/2010	69.10	59.2	6.82	12.19	0.674	0.13
		5/18/2011	0.00	-43.0	6.33	9.93	0.176	2.07
		4/27/2012	0.00	-29.0	6.30	10.27	0.445	1.47
		11/11/2013	36.10	25.0	6.24	11.14	0.387	2.30
		9/5/2014	0.00	-45.0	5.82	14.30	0.213	1.27
		4/22/2015	23.50	-15.0	5.95	9.75	0.471	0.00
		6/2/2015	92.40	-17.0	5.71	8.86	0.41	14.89
		8/4/2015	30.30	-31.0	5.83	17.07	0.394	0.31
		5/26/2016	7.45	-83.1	6.36	19.10	0.321	0.99
SC-2	47 - 67'	5/5/2008	46.00	-20.7	6.36	20.03	0.600	0.84
		9/17/2008	16.00	-9.1	5.96	15.92	0.553	1.95
		6/30/2009	32.80	166.1	6.17	16.34	0.519	0.73
		10/20/2009	26.40	-108.2	6.50	13.63	0.317	0.49
		5/25/2010	6.10	132.9	6.27	15.79	0.321	0.62
		5/16/2011	59.20	237.0	6.05	14.00	0.571	3.25
		4/19/2012	0.00	155.0	6.69	13.92	0.465	1.14
		11/15/2013	25.90	53.0	6.34	12.44	0.508	0.69
		9/15/2014	0.00	318.0	6.51	14.57	0.476	1.22
		8/12/2015	23.60	136.7	6.47	13.90	0.474	0.79

Table 1A
Summary of Historical Groundwater Geochemical Data: Overburden (2006-2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Temperature (C°)	Conductivity (mmhos/cm)	DO (mg/L)
Well ID	Sample Depth	Sample Date						

Notes:

ORP (mV) = Oxidation Reduction Potential measured in millivolts

pH = Measured in Standard Units

Spec Cond (mmhos/cm) = Specific Conductivity measure in millimhos per centimeter

DO (mg/L) = Dissolved Oxygen measured in milligrams per Liter

NR = No Parameters were recorded.

NTU = Nephelometric Turbidity Units

NS = Not Sampled

SU = Standard Units

Geochemical parameters reported at time of sampling.

Table 1B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-1	11-31'	10/6/2006	36.00	221.4	5.68	72	17.24	7.08
		4/17/2007	0.60	242.4	5.72	36	8.83	6.80
		5/6/2008	7.20	149.4	5.27	0.037	11.59	7.47
		9/18/2008	7.70	352.0	5.62	0.085	12.76	6.79
		7/17/2009	0.39	257.1	5.71	0.045	12.73	6.16
		10/20/2009	0.00	120.3	5.73	0.056	11.61	2.52
RW-1	59-79'	4/18/2007	1.10	216.1	5.98	42	10.62	7.13
		5/6/2008	6.90	22.0	6.56	0.131	12.39	5.75
		9/19/2008	1.70	112.4	7.04	0.247	10.35	2.91
		7/17/2009	0.34	-19.4	7.30	0.161	14.01	1.48
		10/20/2009	0.00	-104.2	7.54	0.153	11.98	2.03
		6/30/2010	0.09	-101.4	7.50	0.150	12.97	2.04
RW-1	64-74'	5/26/2011	NR	NR	NR	NR	NR	NR
		4/17/2012	0.00	-91.0	8.70	0.230	21.64	13.74
		8/18/2015	NR	NR	NR	NR	NR	NR
RW-1	98-118'	10/10/2006	3.40	53.8	7.66	218	13.52	7.34
		4/18/2007	2.20	146.7	7.93	200	10.67	2.03
		5/7/2008	1.30	-31.3	7.62	0.201	11.01	2.93
		9/19/2008	1.30	272.9	7.81	0.260	10.96	3.72
		7/17/2009	0.30	-61.7	7.37	0.171	13.75	0.33
		10/20/2009	0.70	-95.6	7.41	0.158	12.21	0.63
RW-1	126-146'	4/18/2007	5.00	13.0	7.93	199	10.97	1.73
		5/7/2008	0.20	-96.9	7.39	0.203	12.40	2.09
		9/22/2008	1.70	-12.4	7.68	0.272	10.66	1.88
		7/17/2009	1.47	-60.1	6.84	0.195	13.51	0.28
		10/20/2009	1.50	-98.9	6.27	0.261	12.14	0.33
		6/30/2010	1.20	-99.6	6.24	0.268	12.12	0.31
RW-1	131-141'	5/26/2011	0.00	0.1	6.70	0.428	15.07	7.60
		4/17/2012	0.00	-22.0	6.75	0.613	15.84	18.03
		8/18/2015	NR	Nr	NR	NR	NR	NR
RW-2	20-50'	10/4/2006	9.60	153.9	6.13	0.869	16.89	36.80
		4/10/2007	2.30	119.2	6.30	1.000	14.45	0.62
		5/1/2008	9.70	117.7	6.15	1.155	14.66	2.61
		9/16/2008	1.30	105.0	6.04	0.670	NR	NR
		7/10/2009	9.21	88.2	5.86	0.975	15.38	1.09
		10/26/2009	9.80	57.3	6.42	0.611	16.05	3.28
RW-2	103-133'	10/4/2006	12.30	12.3	6.59	0.941	16.79	34.10
		4/10/2007	41.70	105.8	6.42	2.000	12.48	1.01
		5/1/2008	7.60	149.1	6.30	1.209	14.37	0.72
		9/17/2008	2.50	634.8	2.70	1.004	14.31	0.31
		7/13/2009	5.29	50.5	6.19	1.062	17.14	0.59
		10/27/2009	6.00	34.3	6.61	0.566	14.19	2.10
RW-2	161-191'	4/16/2007	45.00	95.6	6.73	1340	11.71	2.42
		10/5/2006	25.00	1.2	6.65	361	15.44	44.70
		9/17/2008	NR	NA	NA	NA	NA	NA
		7/13/2009	3.02	47.8	6.34	1.054	17.14	0.63
		10/27/2009	4.80	-2.2	6.64	0.564	14.65	2.58
RW-2	279-289'	4/17/2007	29.00	115.7	6.84	1351	11.66	3.91
		9/11/2008	NR	NA	NA	NA	NA	NA
		7/13/2009	3.44	52.1	6.39	1.055	16.73	0.78
		10/27/2009	3.77	-16.8	6.64	0.596	14.24	2.10
		6/29/2010	3.89	-17.0	6.66	0.594	14.56	2.08
		5/24/2011	0.00	18.0	4.15	2.550	23.11	2.69
		5/8/2012	0.00	-89.0	11.45	14.690	12.18	15.32
		11/19/2013	7.10	-15.0	11.00	1.690	11.06	6.61
		9/26/2014	11.70	-163.0	11.64	1.050	17.1	12.10
		8/21/2015	0.00	-233.0	10.73	1.270	23.23	2.57

Table 1B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-2	442-479'	4/17/2007	9.00	76.4	6.73	1942	37.02	0.13
		5/5/2008	24.00	-61.6	6.61	2.639	22.10	2.14
		7/14/2009	0.32	98.8	5.64	2.494	11.32	0.71
		10/28/2009	5.03	-55.9	6.93	2.272	13.85	1.06
		6/29/2010	NR	NR	NR	NR	NR	NR
		8/25/2015	0.00	-33.0	11.28	3.110	19.43	9.89
RW-2	452-462'	6/3/2011	NR	NR	NR	NR	NR	NR
		5/16/2012	0.00	-23.0	11.37	2.050	23.21	13.71
		11/19/2013	1.10	-92.0	11.34	2.970	11.58	4.10
		9/26/2014	2.20	107.0	11.37	2.050	22.81	11.06
RW-3	62-98'	9/29/2006	0.80	29.0	7.35	0.457	12.74	38.30
		4/5/2007	200.00	-3.5	7.30	397	10.58	0.31
		4/30/2008	32.00	-112.2	7.23	0.404	11.77	0.49
		9/8/2008	4.80	9.4	7.26	0.358	13.55	0.60
		7/6/2009	16.50	38.7	6.82	0.282	13.59	0.50
		10/19/2009	5.80	-34.8	7.27	0.243	11.60	0.37
		6/28/2010	14.60	28.7	6.78	0.249	12.89	0.48
RW-3	77-87'	5/25/2011	0.00	148.0	5.51	0.222	21.88	1.83
		4/27/2012	0.00	-64.0	7.18	0.346	12.31	1.51
		11/11/2013	0.00	-27.0	10.28	0.302	11.52	17.00
		9/15/2014	0.00	65.0	10.53	0.393	18.47	13.62
		8/6/2015	0.00	-26.0	5.89	0.384	16.79	2.40
		5/27/2016	1.80	-25.4	10.74	0.291	14.2	1.23
RW-3D	140-165'	6/9/2010	29.20	-107.9	7.32	0.335	13.01	2.38
		5/24/2011	5.00	-152.0	7.36	0.471	14.86	1.13
		11/12/2013	0.00	-56.0	10.69	1.860	7.28	24.40
RW-3D	170-181'	6/9/2010	50.80	-122.6	7.43	0.332	12.56	0.85
		5/24/2011	5.00	-165.0	7.29	0.476	15.25	1.00
RW-3DD	175-180'	4/30/2012	0.00	-297.0	12.02	1.450	13.16	0.75
		11/12/2013	0.00	-18.0	8.27	0.457	8.30	25.24
		9/12/2014	0.00	127.0	7.55	0.339	14.66	16.63
		8/10/2015	11.20	-150.0	10.58	0.283	19.40	13.45
		5/31/2016	4.50	-190.2	8.91	0.184	15.00	1.41
RW-3DS	155-160'	4/30/2012	0.00	-84.0	12.01	2.340	16.89	13.21
		11/12/2013	0.00	-56.0	10.69	1.860	7.28	24.40
		9/11/2014	0.00	69.0	10.29	1.330	17.00	14.32
		8/25/2015	8.00	-84.0	10.40	1.640	19.65	1.61
		5/27/2016	2.30	-239.0	10.05	0.293	17.80	2.90
RW-4A	62-77'	6/25/2010	0.28	83.2	6.89	0.102	11.27	6.53
RW-4A	62-72'	5/25/2011	0.00	169.0	5.98	0.175	17.95	NR
		4/25/2012	0.00	20.0	9.69	0.157	13.69	15.05
		11/18/2013	2.40	147.0	6.72	0.105	9.30	7.35
		9/10/2014	0.00	118.0	7.78	0.119	19.35	10.70
		8/10/2015	1.35	51.0	7.40	0.094	18.52	14.75
		6/25/2010	0.67	175.3	9.12	0.187	11.23	2.11
RW-4A	113-123'	5/25/2011	0.00	177.0	6.28	0.230	13.52	NR
		4/25/2012	0.00	68.0	8.07	0.160	12.20	14.82
		11/8/2013	1.50	145.0	6.86	0.146	7.22	12.78
		9/10/2014	0.00	177.0	7.36	0.134	18.03	10.96
		8/24/2015	0.00	194.0	6.75	0.126	15.04	11.11
		10/2/2006	825.00	177.0	6.60	0.232	12.64	36.40
RW-4	57-77'	4/6/2007	NR	44.8	7.01	112	5.29	1.61
		4/28/2008	10.00	122.0	6.65	0.114	12.87	3.47
		9/15/2008	16.00	-1.4	6.76	0.123	14.78	4.23
		6/30/2009	26.20	394.7	6.65	0.087	12.91	1.87
		10/21/2009	24.00	41.7	6.52	0.088	12.05	4.84
RW-4	108-128'	10/2/2006	3.41	217.2	6.82	0.289	12.37	57.10
		4/9/2007	NA	133.1	7.02	139	10.62	4.50
		4/29/2008	6.80	189.7	7.01	0.144	10.85	6.31
		9/16/2008	NR	121.6	6.50	0.145	11.31	5.85
		6/30/2009	20.50	145.8	6.60	0.096	12.96	3.46
		10/22/2009	16.00	68.9	6.68	0.099	11.74	4.89

Table 1B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-4	328-348'	10/3/2006	19.00	206.6	6.74	0.263	11.99	84
		4/9/2007	NR	142.8	6.75	119	10.96	5.09
		4/29/2008	NR	135.7	6.71	0.123	10.9	7.90
		9/9/2008	NR	160.6	6.91	0.137	14.19	7.08
		7/2/2009	22.90	267.8	6.61	0.097	12.66	6.13
		10/23/2009	12.00	90.9	6.87	0.096	10.32	5.30
RW-4	333-343'	6/7/2011	0.00	39.0	11.34	1.310	18.87	3.25
		4/25/2012	0.00	-32.0	12.22	1.200	12.89	15.19
		11/11/2013	10.10	101.0	12.08	0.300	10.72	12.23
		9/9/2014	36.50	30.0	12.22	0.767	16.13	13.20
		8/24/2015	0.00	-15.0	11.40	0.532	16.1	10.90
RW-4	388-408'	10/3/2006	18.50	270.9	6.79	0.265	12.72	87.30
		4/9/2007	6.30	142.4	6.77	119	10.20	5.31
		4/29/2008	14.00	226.6	6.52	0.125	11.47	28.44
		9/10/2008	7.90	172.9	5.88	0.122	11.63	6.93
		7/2/2009	30.20	338.9	6.35	0.091	13.14	7.19
		10/23/2009	14.00	16.4	6.83	0.092	10.81	5.55
RW-4	393-403'	6/25/2010	0.84	143.4	9.16	0.160	11.27	2.88
		5/25/2011	NR	NR	NR	NR	NR	NR
		4/26/2012	0.00	207.0	6.89	0.244	10.64	14.96
		11/11/2013	0.00	50.0	11.07	0.160	10.60	17.08
		9/10/2014	0.00	200.0	8.11	0.245	15.88	12.94
		8/10/2015	26.80	124.0	8.25	0.356	18.20	14.48
RW-5	40-51'	9/26/2006	77.90	-99.0	7.15	0.261	10.20	41.50
		4/13/2007	59.30	-108.7	7.25	500.000	5.57	1.94
RW-5	64-75'	7/7/2009	NR	-71.4	6.76	NR	NR	0.20
		9/28/2006	73.90	238.9	6.77	0.464	12.41	0.34
RW-5	100-120'	4/12/2007	41.50	-56.6	7.88	254	7.55	7.26
		10/4/2006	22.90	292.3	7.22	0.774	11.25	65.60
		9/28/2006	-5.70	376.6	6.51	0.147	19.73	66.00
		4/12/2007	20.60	-88.9	7.10	518	11.04	0.21
		10/15/2007	NR	-92.3	7.08	NR	NR	4.66
		5/2/2008	6.80	-86.6	6.67	0.741	9.20	0.39
		7/7/2009	1.30	-71.4	6.76	0.390	11.00	0.20
		9/17/2008	3.28	-82.1	6.45	0.615	12.96	1.47
		10/27/2009	8.80	-96.7	6.77	0.414	11.66	1.09
		6/1/2010	1.96	-97.3	7.60	0.375	12.06	0.59
RW-5	99-119'	5/20/2011	0.00	-153.0	7.32	0.815	9.05	0.67
		4/26/2012	0.00	-172.0	8.01	0.444	9.39	2.91
		11/14/2013	14.70	-74.0	10.14	0.429	10.66	7.97
		9/4/2014	41.00	-139.0	10.92	0.651	16.62	8.16
		8/5/2015	46.20	-283.0	10.62	0.472	15.75	5.10
		5/25/2016	12.80	-211.0	11.32	0.478	12.1	0.89
RW-5A	58-78'	10/15/2007	NR	178.9	7.79	NR	NR	3.87
		4/29/2008	0.20	-23.3	10.94	0.778	10.25	0.22
		9/12/2008	8.90	73.5	5.37	0.457	NA	0.96
		7/7/2009	12.40	-219.2	8.24	0.775	11.09	0.06
		10/28/2009	0.00	-167.2	8.89	0.564	11.41	0.24
		6/1/2010	3.05	48.5	8.45	0.995	12.29	0.23
RW-5A	54-74'	5/18/2011	52.40	-139.0	7.81	0.406	11.05	1.06
		4/25/2012	30.20	106.0	5.10	0.528	11.24	0.63
		11/18/2013	48.90	14.0	6.05	0.890	11.01	2.09
		9/10/2014	21.70	-19.0	6.39	0.789	15.88	0.99
		8/24/2015	36.80	-24.0	6.12	0.589	11.89	0.00
		5/25/2016	6.82	-15.8	7.00	0.457	14.1	1.55
RW-6	10-20'	5/2/2008	4.00	-98.9	6.62	0.755	9.11	0.22
RW-6	53-64'	9/27/2006	7.60	-70.5	6.09	0.381	16.38	39.00
		4/2/2007	6.40	-64.8	6.41	615	12.96	1.21
RW-6	70-81'	9/27/2006	4.00	-48.8	6.24	0.665	13.28	1.80
		4/3/2007	0.90	-60.5	6.41	652	11.47	0.32

Table 1B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-6	100-120'	10/9/2006	20.00	-36.0	6.55	666	11.32	6.56
		4/6/2007	NR	-61.2	6.46	616	9.19	0.44
		10/10/2007	NR	-27.6	6.17	NR	NR	0.76
		9/15/2008	3.00	-57.5	6.13	0.585	11.91	8.95
		7/9/2009	2.71	-6.9	6.40	0.491	10.71	0.37
		10/28/2009	1.56	-112.3	6.70	0.422	10.68	0.38
		6/2/2010	6.91	-48.0	6.91	0.400	12.26	0.43
RW-6	99-119'	5/18/2011	0.00	-82.0	6.63	0.554	10.30	2.37
		4/27/2012	20.70	-10.0	6.98	0.438	10.70	0.80
		11/18/2013	0.30	-72.0	6.44	0.564	11.73	8.30
		4/22/2015	5.30	-82.0	6.56	0.531	14.64	0.00
		6/2/2015	9.70	-65.0	6.38	0.486	9.17	0.00
		8/6/2015	17.90	-92.0	5.61	0.542	12.12	0.00
		5/26/2016	3.25	-124.7	6.55	0.520	12.50	0.52
RW-6A	54-74'	10/16/2007	NR	-27.9	6.36	NR	NR	3.24
		5/2/2008	3.11	-30.4	6.31	0.559	9.80	0.23
		9/15/2008	2.52	37.9	5.96	0.411	12.33	0.12
		7/9/2009	7.64	-14.1	6.62	0.446	10.69	0.44
		10/28/2009	1.00	-109.6	6.63	0.387	10.29	0.19
		6/2/2010	2.66	-39.9	6.21	0.485	11.23	0.21
RW-6A	58-78'	5/18/2011	0.00	27.0	5.70	0.520	9.71	1.60
		4/27/2012	0.00	-51.0	6.56	0.517	11.05	1.87
		11/8/2013	0.00	-44.0	6.24	0.634	10.88	5.21
		9/5/2014	43.20	-53.0	6.56	0.582	12.45	3.39
		4/21/2015	4.60	-33.0	6.23	0.677	10.55	0.00
		6/1/2015	0.00	-48.0	6.24	0.583	10.68	0.00
		8/4/2015	34.30	-43.0	5.69	0.619	17.01	0.35
RW-7	34-45'	5/26/2016	2.24	-127.5	6.50	0.480	14.9	1.11
		9/26/2006	24.60	189.8	6.46	0.135	13.36	6.38
		4/3/2007	55.00	334.0	4.43	115	12.21	4.45
RW-7	49-60'	9/26/2006	23.10	224.5	6.33	0.126	14.12	7.35
		4/4/2007	7.30	73.0	6.75	138	8.34	4.55
RW-7	80-100'	9/28/2006	1.10	217.6	6.62	0.136	13.43	74.00
		4/3/2007	5.70	150.0	6.66	118	11.52	5.69
RW-7	100-120'	9/28/2006	NR	376.6	6.51	NR	NR	66.00
		4/4/2007	1.90	218.6	6.78	132	8.66	5.12
		10/15/2007	NR	174.5	6.90	NR	NR	8.45
		5/5/2008	7.14	155.3	6.71	0.116	10.17	5.87
		9/12/2008	29.30	167.9	6.22	0.115	12.25	5.83
		7/7/2009	4.00	293.1	6.37	0.096	11.99	5.97
		10/27/2009	10.00	188.9	6.69	0.850	11.96	7.08
RW-7	99-119'	6/1/2010	13.70	144.7	6.20	0.089	12.37	6.15
		5/18/2011	0.00	92.0	6.67	0.121	11.99	4.96
		4/24/2012	0.00	182.0	6.54	0.107	13.39	3.26
		11/7/2013	0.00	193.0	7.59	0.133	11.07	7.03
		9/4/2014	0.00	154.0	5.82	0.312	13.11	7.03
		4/20/2015	12.00	197.0	6.22	0.102	10.91	0.00
RW-8A	47-57'	8/6/2015	49.80	-15.0	6.70	0.110	13.19	9.63
		5/2/2012	NR	NR	NR	NR	NR	NR
RW-8	42-62'	8/18/2015	NR	NR	NR	NR	NR	NR
		7/7/2009	3.11	108.4	5.53	0.166	14.92	3.69
RW-8	158-178'	11/4/2009	0.00	120.5	5.81	0.145	12.98	3.70
		7/7/2009	1.47	-60.1	6.87	0.469	18.29	0.82
		11/4/2009	0.00	-89.8	7.37	0.404	12.61	0.89
RW-8	163-173'	6/23-6/28/2010	NR	NR	NR	NR	NR	NR
		5/31-6/1/2011	0.00	12.0	6.79	0.320	21.30	1.73
		5/2-5/3/2012	0.00	4.0	9.93	0.621	13.22	15.98
		11/15/2013	0.00	53.0	8.03	0.664	13.51	12.82
		9/22/2014	5.50	-66.0	7.97	0.635	19.34	4.04
		8/18/2015	0.00	-16.0	7.63	0.493	19.89	9.75

Table 1B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-8	199-219'	7/7/2009	2.11	-103.8	7.13	0.784	20.48	1.17
		11/4/2009	1.84	-102.5	7.20	0.582	12.91	1.27
		6/23-6/28/2010	NR	NR	NR	NR	NR	NR
RW-8	204-214'	5/31-6/1/2011	NR	NR	NR	NR	NR	NR
		5/2/2012	NR	NR	NR	NR	NR	NR
		11/14-11/15/13	4.70	98.0	8.52	1.240	11.38	12.58
		9/22-9/23/14	18.10	32.0	8.39	0.928	20.44	5.17
		8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR
RW-9A	25-35'	5/31/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
		8/20/2015	NR	NR	NR	NR	NR	NR
RW-9A	85-95'	6/23/2010	NR	NR	NR	NR	NR	NR
		6/1/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
		9/23-9/24/14	0.00	-34.0	6.84	0.179	24.22	10.02
		8/20/15 - 8/21/15	NR	NR	NR	NR	NR	NR
RW-9	20-40'	7/15/2009	0.23	385.1	6.48	0.153	14.72	8.13
		11/2/2009	0.10	90.4	6.27	0.122	11.82	6.03
RW-9	80-100'	7/15/2009	0.00	107.4	6.64	0.204	18.13	7.73
		11/2/2009	0.28	-62.4	7.22	0.288	13.75	2.51
RW-9	134-154'	7/16/2009	5.90	-97.1	7.63	0.255	13.97	0.49
		11/2/2009	0.32	-68.5	7.32	0.280	12.65	1.98
		5/26/2011	NR	NR	NR	NR	NR	NR
		4/19-4/20/2012	NR	NR	NR	NR	NR	NR
RW-9	139'-149'	8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR
RW-9	201-221'	7/16/2009	4.11	-83.2	7.27	0.329	20.21	0.57
		11/3/2009	1.28	-93.6	7.41	0.281	11.70	2.79
		6/23-6/28/2010	NR	NR	NR	NR	NR	NR
		5/26/2011	NR	NR	NR	NR	NR	NR
		4/20/2012	NR	NR	NR	NR	NR	NR
		11/19-11/20/2013	0.00	-161.0	8.76	0.970	9.90	6.20
RW-9	206' 216'	8/20/15 - 8/21/15	NR	NR	NR	NR	NR	NR
RW-10	22-42'	7/8/2009	1.42	249.3	5.33	0.164	12.43	7.53
		10/29/2009	0.78	106.0	5.87	0.144	10.61	6.15
RW-10	46-66'	7/9/2009	3.11	169.5	6.06	0.176	10.96	4.90
		10/29/2009	1.46	89.3	5.78	0.144	36.98	6.04
RW-10	70-90'	7/9/2009	6.10	154.9	5.99	0.175	12.02	5.23
		10/29/2009	0.30	78.0	6.00	0.242	12.50	3.25
		11/14/2013	28.60	251.0	7.80	0.910	9.02	5.86
RW-10	115-135'	7/9/2009	5.72	209.6	6.04	0.175	13.25	1.67
		10/29/2009	0.58	47.1	6.15	0.254	12.27	1.82
RW-10	120-130'	6/23-6/25/2010	NR	NR	NR	NR	NR	NR
		5/31-6/1/2011	NR	NR	NR	NR	NR	NR
		4/18-4/19/2012	0.00	-5.0	11.15	0.828	24.29	13.38
		9/17/2014	4.10	102.0	11.77	0.878	18.30	13.12
		8/18/15 - 8/19/15	NR	NR	NR	NR	NR	NR
RW-10	180-200'	7/9/2009	5.13	-8.0	7.03	0.335	12.73	0.96
		10/30/2009	1.93	-74.9	6.77	0.322	10.51	0.33
RW-10	185-195'	6/23-6/28/2010	1.64	-73.2	6.75	0.320	11.47	0.30
		5/31/2011	0.00	-64.0	11.62	1.150	23.69	1.40
		4/17-5/4/2012	0.0/0.0	2.8	10.88/11.03	0.993/0.522	13.00/15.19	8.20/15.45
		11/13/2013	8.00	-83.0	10.43	0.529	8.25	13.09
		9/17/2014	0.70	84.0	11.47	0.589	17.01	12.69
		8/18/2015	2.50	-41.0	11.13	0.517	16.99	1.61
		6/2/2011	0.00	36.0	6.72	0.467	18.46	0.76
RW-10A	51-61'	9/18/2014	1.80	64.0	7.72	0.531	18.74	10.56
		8/19/15 - 8/20/15	NR	NR	NR	NR	NR	NR

Table 1B
Summary of Historical Groundwater Geochemical Data: Bedrock (2006 - 2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
RW-10A	75-85'	6/23-6/28/2010	36.00	72.3	7.40	0.271	11.14	1.07
		6/2/2011	0.00	162.0	6.62	0.324	17.31	1.70
		4/18-5/4/2012	0.0/0.0	195/19	6.16/9.54	0.440/0.419	12.71/14.05	8.90/16.07
		11/14/2013	0.92	28.6	7.80	0.910	9.02	5.86
		9/18/2014	6.10	278.0	7.68	0.369	13.62	13.04
		8/18/2015	0.00	167.0	6.91	0.352	15.91	3.88
RW-11	100-125'	6/7/2010	11.90	143.8	5.55	0.042	16.53	8.76
		5/26/2011	0.00	211.0	5.73	0.053	11.04	8.99
RW-11	142-167'	6/7/2010	6.30	165.8	5.56	0.040	13.97	9.63
		5/26/2011	0.00	210.0	5.61	0.054	10.41	7.70
RW-11	221-246'	6/8/2010	7.97	99.0	6.42	0.124	13.71	7.70
		5/25/2011	0.00	232.0	4.99	0.032	12.81	7.47
RW-11	252-272'	6/8/2010	4.21	94.6	6.43	0.127	14.12	2.74
		5/25/2011	0.00	225.0	5.44	0.054	15.46	6.24
RW-11D	262-267'	5/1/2012	0.00	9.0	11.11	0.911	12.00	5.59
		5/1/2012	0.00	-91.0	12.51	4.860	11.63	6.23
		11/14/2013	15.10	-97.0	11.90	3.550	9.28	7.34
		8/25/15 - 8/26/15	NR	Nr	NR	NR	NR	NR
		5/27/2016	16.60	-342.0	12.46	0.367	22.60	1.26
RW-11S	236-241'	5/1/2012	0.00	-4.0	10.45	0.187	11.96	5.70
		11/13/2013	0.00	20.0	6.67	0.149	9.76	3.24
		9/12/2014	0.00	98.0	7.85	0.107	20.85	9.16
		8/12/2015	0.00	101.0	7.18	0.105	17.75	10.42
		5/27/2016	0.80	-160.7	8.34	0.106	14.80	1.46
RW-12	50-76'	5/10/2012	38.90	-290.0	7.27	0.589	11.40	0.88
		96-116'	5/10/2012	47.30	-164.0	8.06	0.604	12.22
		125-148'	5/11/2012	35.30	45.0	5.59	0.609	1.72
RW-12	55-65	9/19/2014	0.00	41.0	13.11	1.770	23.71	3.50
		8/17/2015	0.00	-100.0	11.05	1.480	26.10	1.24
RW-12	130-140	9/19/2014	0.00	58.0	2.12	1.540	14.66	6.55
		8/12/2015	2.89	-78.0	11.50	1.140	20.30	12.51
RW-13	71-91'	11/12/2013	33.00	-54.0	8.23	0.274	6.83	1.20
		8/24/2015	147.20	97.5	7.87	0.625	16.10	0.68
		11/13/2013	49.70	-30.0	7.91	0/266	10.24	7.84
		8/12/15 - 8/13/15	NR	Nr	Nr	Nr	NR	NR
		130-150'	11/14/2013	49.20	-136.0	8.20	0.247	10.46
RW-13	100-120'	11/14/2013	27.00	-118.0	8.75	0.241	10.89	1.50
		9/16/2014	0.00	120.0	12.59	3.980	20.56	1.79
RW-13	150-170'	9/16/2014	0.00	48.0	7.10	0.349	21.03	2.35
		8/12/2015	2.10	-65.0	7.73	0.339	21.04	9.00
RW-14S	135-153'	5/31/2016	8.50	46.2	8.87	0.450	19.50	1.59
RW-14D	175-185'	5/31/2016	16.20	-35.0	7.14	0.656	19.90	1.01
RW-15S	110-120'	5/27/2016	2.20	-115.5	12.07	1.052	23.30	1.75
RW-15D	127-137'	5/27/2016	3.10	-133.1	12.50	2.020	19.20	2.52
RW-16	52 - 62'	5/24/2016	34.00	-68.9	6.88	0.429	11.5	1.25

Notes:

NTU = Nephelometric Turbidity Units

ORP (mV) = Oxidation Reduction Potential measured in millivolts

pH = Measured in Standard Units

Spec Cond (mmhos/cm) = Specific Conductivity measure in millimhos per centimeter

Temp °C = Temperature measured in degrees Centigrade

DO (mg/L) = Dissolved Oxygen measured in milligrams per Liter

NR = Parameters not recorded

SU = Standard Units

Geochemical parameters reported at time of sampling.

Table 1C
Summary of Historical Mine Water Geochemical Data (2006 - 2016)

Ringwood Mines/Landfill Superfund Site

Geochemical Parameters			Turbidity (NTU)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temperature (C°)	DO (mg/L)
Well ID	Sample Depth	Sample Date						
CM AIRSHAFT	50'	5/7/2012	0.00	-82.0	7.06	0.061	14.41	2.86
		9/12/2014	0.00	-103.0	6.68	1.170	12.57	0.48
		8/14/2015	16.10	-52.6	6.46	0.104	16.70	2.23
CM AIRSHAFT	100'	5/7/2012	0.00	-95.0	7.12	1.110	14.82	3.01
		9/18/2014	42.40	-107.0	6.81	0.933	12.55	0.58
		8/17/2015	28.50	-89.0	6.69	0.914	14.49	3.20
CM AIRSHAFT	160'	5/9/2012	0.00	-95.0	7.11	1.000	18.85	1.85
		9/18/2014	43.80	-107.0	6.86	0.884	12.99	0.68
		8/17/2015	37.00	-77.0	6.61	0.940	12.42	2.06
CM AIRSHAFT	275'	5/9/2012	0.00	-116.0	7.23	0.882	22.32	4.01
		9/18/2014	241.00	-103.0	6.77	0.830	13.03	0.58
		8/18/2015	80.10	-83.0	6.68	0.920	14.39	2.50
PM AIRSHAFT	50'	4/23/2012	1.50	197.0	6.53	0.061	11.10	6.03
		9/16/2014	2.30	360.0	5.43	0.057	12.50	7.88
		8/12/2015	23.40	-197.8	6.45	0.659	14.80	2.73
		6/1/2016	4.09	-16.8	7.79	0.043	12.20	6.00
		8/22/2007	NR	30.7	5.89	NR	NR	3.19
PM AIRSHAFT	180'	10/15/2007	NR	-51.2	6.42	NR	NR	4.49
		5/7/2008	1.30	98.8	5.76	0.051	13.27	6.78
		9/18/2008	7.00	-77.3	6.11	0.014	14.56	1.50
		7/10/2009	3.65	30.8	5.99	0.350	14.44	0.37
		10/29/2009	6.50	17.8	5.97	0.048	12.73	0.04
		6/4/2010	0.61	92.1	6.15	0.035	12.78	5.50
		5/24/2011	1.40	-17.0	6.18	0.204	9.06	4.73
		4/23/2012	0.00	207.0	6.47	0.039	10.84	6.25
		9/16/2014	2.90	-345.0	5.99	0.551	12.79	0.87
		8/17/2015	35.00	-95.0	6.27	0.424	17.75	8.03
		6/1/2016	7.00	-166.4	6.38	0.411	12.9	0.30
PM AIRSHAFT	230'	8/22/2007	NR	-35.5	6.10	NR	NR	1.86
		10/15/2007	NR	-58.6	6.36	NR	NR	4.03
		5/7/2008	0.00	-43.6	5.96	1.074	12.94	1.22
		9/18/2008	24.00	-80.6	6.66	0.006	17.35	3.83
		7/10/2009	4.57	30.1	5.62	0.355	14.95	0.45
		10/29/2009	1.02	-86.8	6.08	0.833	12.76	0.35
		6/4/2010	0.27	-87.3	6.08	0.783	12.81	0.25
		5/24/2011	82.20	-69.0	6.19	0.978	9.00	0.33
		4/24/2012	0.00	180.0	6.62	0.065	11.00	9.01
		9/17/2014	0.00	-106.0	6.21	0.970	14.44	0.57
		8/18/2015	0.00	-95.0	6.29	0.941	15.52	2.00
		6/1/2016	31.90	-80.1	6.65	0.742	15.3	0.21

Notes:

NTU = Nephelometric Turbidity Units

ORP (mV) = Oxidation Reduction Potential measured in millivolts

pH = Measured in Standard Units

Spec Cond (mmhos/cm) = Specific Conductivity measure in millimhos per centimeter

Temp °C = Temperature measured in degrees Centigrade

DO (mg/L) = Dissolved Oxygen measured in milligrams per Liter

NR = Parameters not recorded

SU = Standard Units

Geochemical parameters reported at time of sampling.

Table 1D
Summary of Field Parameters at Sampling Time - Overburden Wells - May-June 2016

Ringwood Mines/Landfill Superfund Site

Well ID	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (ml/pm)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water (feet)	Diss. Oxygen (mg/L)
OB-11R	5/25/2016	9:26	Low Flow	45	220	22.3	-121.40	6.61	0.436	12.70	16.34	0.77
OB-14A	5/23/2016	16:21	Low Flow	40	100	18.5	-10.40	3.78	0.268	13.70	8.96	0.41
OB-14B	5/23/2016	15:26	Low Flow	50	150	3.0	38	4.07	0.23	13.81	13.63	0.36
OB-16	5/23/2016	13:06	Low Flow	45	140	7.62	24.30	4	0.719	11.80	17.95	0.20
OB-17	5/24/2016	11:56	Low Flow	50	140	22.1	-54.10	4.9	0.522	10.70	5.58	0.52
OB-18	5/23/2016	10:35	Low Flow	40	140	3.09	230.20	6.93	0.249	10.80	3.70	1.14
OB-19	5/25/2016	13:36	Low Flow	45	170	2.88	185.80	6.30	0.187	11.00	11.01	6.45
OB-20A	5/26/2016	10:35	Low Flow	50	150	1.7	-105.80	6.62	0.182	11.80	14.80	0.29
OB-20B	5/26/2016	9:36	Low Flow	65	120	19.7	-39	6.31	0.383	11.90	14.50	0.31
OB-24	5/24/2016	9:21	Low Flow	35	100	38.7	-97.10	5.68	0.626	10.60	4.12	0.66
OB-27	5/25/2016	10:36	Low Flow	45	140	17.9	-147.50	6.7	0.288	11.00	14.79	1.95
OB-28	5/23/2016	11:46	Low Flow	50	150	15.8	167.60	7.01	0.709	10.9	1.41	0.20
OB-31	5/25/2016	15:56	Low Flow	55	140	13.7	-85.70	6.93	0.199	13.1	14.88	0.33
OB-32	5/25/2016	17:01	Low Flow	35	220	3.2	-97	6.74	0.286	11.9	22.95	0.37
OB-33	5/24/2016	15:41	Low Flow	125	220	82.0	71.50	6.30	0.005	11.9	8.61	2.86
SC-1	5/26/2016	17:04	Low Flow	35	120	7.45	-83.10	6.36	0.321	19.10	14.15	0.99

Notes:

--- = well was destroyed

°C = degrees Celsius

mg/L = milligrams per liter

mL/pm = milliliters per minute

mmhos/cm = millimhos per centimeter

mV = millivolts

NTU = Nephelometric Turbidity Unit

ORP = oxidation-reduction potential

SU = Standard Units

NS = Not Sampled

NR = Not Recorded

Table 1E
Summary of Field Parameters at Sampling Time - Bedrock Monitoring Wells - May-June 2016

Ringwood Mines/Landfill Superfund Site

Well ID	Interval (ft bgs)	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (ml/pm)	Turbidity (NTUs)	ORP (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water (feet)	Dissolved Oxygen (mg/L)
RW-3	77 to 87	5/27/2016	14:10	ZIST	20	75	1.8	-25.40	10.74	0.291	14.20	13.26	1.23
RW-3DS	155 to 160	5/27/2016	15:05	ZIST	11	100	2.3	-239	10.05	0.293	17.80	16.55	2.90
RW-3DD	175 to 180	5/31/2016	9:47	ZIST	15	89	4.5	-190.20	8.91	0.184	15.00	17.02	1.41
RW-5	99 to 119	5/25/2016	14:31	Low-flow	40	100	12.8	-211	11.32	0.478	12.10	12.24	0.89
RW-5A	54 to 74	5/25/2016	12:06	Low-flow	80	100	6.8	-15.80	7.00	0.457	14.1	12.00	1.55
RW-6	99 to 119	5/26/2016	11:41	Low-flow	35	110	3.3	-124.70	6.55	0.520	12.50	12.90	0.52
RW-6A	58 to 78	5/26/2016	12:46	Low-flow	45	100	2.24	-127.50	6.50	0.480	14.90	13.45	1.11
RW-11S	236 to 241	5/27/2016	9:26	ZIST	13	62	0.8	161	8.34	0.106	14.08	10.99	1.46
RW-11D	262 to 267	5/27/2016	10:09	ZIST	17	115	16.6	-342	12.46	0.367	22.60	11.02	1.26
RW-14S	135 to 153	5/31/2016	12:47	ZIST	40	80	8.5	46.2	8.87	0.45	19.5	10.99	1.59
RW-14D	175 to 185	5/31/2016	13:33	ZIST	12	133	16.2	-35	7.14	0.656	19.9	11.02	1.01
RW-15S	110 to 120	5/27/2016	12:29	ZIST	12	100	2.2	-115.5	12.07	1.052	23.3	9.46	1.75
RW-15D	127 to 137	5/27/2016	11:37	ZIST	12	100	3.1	-133.1	12.50	2.02	19.2	2.24	2.52
RW-16	52 to 62	5/24/2016	10:26	Low-flow	35	150	34.0	-68.9	6.88	0.429	11.5	5.05	1.25

Notes:

* Samples were collected on multiple days.

--- = no parameters were recorded due to poor yield

°C = degrees Celsius

ft bgs = feet below ground surface

mg/L = milligrams per liter

mL/pm = milliliters per minute

mmhos/cm = millimhos per centimeter

mV = millivolts

NTU = Nephelometric Turbidity Unit

ORP = oxidation-reduction potential

SU = Standard Units

ZIST = Zone Isolation System Technology

NM = Not Measureable

NS = Not Sampled

Table 1F
Summary of Field Parameters at Sampling Time - Peters Mine Shaft - May-June 2016

Ringwood Mines/Landfill Superfund Site

Well ID	Sample Dep (ft bgs)	Sample Date	Sample Time	Sample Method	Minutes elapsed	Rate (mL/pm)	Turbidity (NTUs)	ORP (mV)	pH (SU)	Conductivity (mmhos/cm)	Temperature (°C)	Depth to Water (feet)	Dissolved Oxygen (mg/L)
PMAirShaft	50	6/1/2016	9:31	Low Flow	40	240	4.1	-16.8	7.79	0.043	12.2	8.57	6
	180	6/1/2016	11:01	Low Flow	50	400	7.0	-166.4	6.38	0.411	12.9	8.57	0.3
	230	6/1/2016	12:51	Low Flow	45	360	31.9	-80.1	6.65	0.742	15.3	8.57	0.21

Notes:

°C = degrees Celsius

ft bgs = feet below ground surface

mg/L = milligrams per liter

mL/pm = milliliters per minute

mmhos/cm = millimhos per centimeter

mV = millivolts

NTU = Nephelometric Turbidity Unit

ORP = oxidation-reduction potential

SU = standard units

Table 1G
Summary of Surface Water Field Parameters - May 2016

Ringwood Mines/Landfill Superfund Site

Surface Location	Date	Time (hrs.)	NTU	Redox	pH	Conductivity (ms/cm)	Temperature (C°)	D.O. (mg/l)	Stream width (inches)	Flow rate (ft/s)
SR 3-Seep-2	5/20/2016	9:55	1.3	-29	6.33	0.272	10.32	2.83	NA	NA
SR 3 Pond	5/20/2016	9:20	36	133	6.6	0.188	13.82	8.82	NA	NA
SR 3-Seep-1	5/20/2016	9:35	123	-9	6.64	0.21	15.38	2.67	NA	NA
SW-NOB -02	5/19/2016	10:30	2.9	185	7.25	0.063	11.45	12.04	8	0.23
SW-PAB -04	5/19/2016	10:45	1.3	217	7.56	0.106	12.26	10.36	18	0.14
SW-PMB - 02	5/19/2016	13:35	1.3	64	7.64	0.421	14.3	1.18	18	0.18
SW-PMB - 01	5/19/2016	13:50	50.5	9	6.99	0.57	17.55	5.18	12	0.15
SW-MRB-03	5/19/2016	12:50	1.8	248	7	0.076	16.1	7.5	21	0.13
SW-MRB-02	5/19/2016	13:05	4	152	6.59	0.027	16.91	8.21	17	0.05
PMP Pond	5/20/2016	10:45	70.5	85	7.13	0.169	15.07	3.71	NA	NA
SW-PAB-03	5/19/2016	15:00	0	58	7.07	0.123	15.93	6.25	19	0.2
SW-PAB-02	5/19/2016	13:35	1.3	64	7.64	0.421	14.3	11.18	24	0.07
SW-PAB-01A	5/19/2016	15:20	10.8	11	6.83	0.099	13.58	9.29	21	0.19
SW-PAB-01	5/20/2016	10:15	9.5	35	6.24	0.107	10.88	3.55	28	0.49
SW-SP-01	5/19/2016	11:15	2.1	222	7.67	0.144	15.53	10.5	NA	NA
SW-04	5/19/2016	12:05	1.4	236	7.67	0.282	14.18	10.3	NA	NA
SW-03	5/19/2016	12:20	4.3	231	7.29	0.141	15.02	10.02	NA	NA

TABLE 2A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) AND 1,4-DIOXANE IN GROUNDWATER
MAY/JUNE 2016
RINGWOOD MINES/LANDFILL SUPERFUND SITE

TABLE 2B
ARYL OF VOLATILE ORGANIC COMPOUND (VOCs) AND 1,4-DIOXANE IN GROUNDWATER
MAY/JUNE 2016
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Tentatively Identified Compounds (TICs)

See Table 5 for validation qualifiers.

** Interim GWOC (NIACZ:QC)

Result exceeds NJGWQS (NJAC 7:9B April 2015)

Result exceeds NJGWQS (NJAC 7.9B April 2011) or Interim GWQC (NJAC 7.9C Nov. 25, 2013)

TABLE 3A
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) AND 1,4-DIOXANE IN MINE WATER
MAY/JUNE 2016
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJ GWQS ug/L	PM-AIRSHAFT-180	PM-AIRSHAFT-180 (Split)	PM-AIRSHAFT-230
1,1-Dichloroethane	ug/l	50	0.84 J		0.27 J
1,2-Dichlorobenzene	ug/l	600			0.41 J
1,3-Dichlorobenzene	ug/l	600			1.3
1,4-Dichlorobenzene	ug/l	75	0.63 J		3.6
2-Butanone (MEK)	ug/l	300			
Acetone	ug/l	6000			
Benzene	ug/l	1	6.4		25
Carbon disulfide	ug/l	700			0.64 J
Chlorobenzene	ug/l	50	1.1		13
Chloroethane	ug/l	5**	48		23
cis-1,2-Dichloroethene	ug/l	70	0.39 J		0.34 J
Cyclohexane	ug/l		2		2 *
Ethylbenzene	ug/l	700			1.7
Isopropylbenzene	ug/l	700	1.9		7
Methyl tert butyl ether	ug/l	70			
Methylcyclohexane	ug/l		0.83 J		0.47 J *
Toluene	ug/l	600			0.25 J
Xylenes	ug/l	1000	1.3 J		7.7
1,4-Dioxane *	ug/l	0.4**	5	6.2	15
Tentatively Identified Compounds (TICs)					
None					
See Table 5 for validation qualifiers.					
* Analyzed via Method 8270 SIM					
** Interim GWQC (NJAC7:9C Nov. 25, 2015)					
Result exceeds NJGWQS (NJAC 7:9B April 2011) or Interim GWQC (NJAC 7:9C Nov. 25, 2015)					

TABLE 3B
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCS) AND 1,4-DIOXANE IN MINE WATER
MAY/JUNE 2016
RINGWOOD MINES/LANDFILL SUPERFUND SITE

Parameter	Result Unit	NJGWQS ug/l	PM-AIRSHAFT-50	PM-AIRSHAFT-180	PM-AIRSHAFT-180 (Split)	PM-AIRSHAFT-230
1,1,1-Trichloroethane	ug/l	30	< 0.28 U	< 0.28 U		< 0.28 U
1,1,2,2-Tetrachloroethane	ug/l	1	< 0.19 U	< 0.19 U		< 0.19 U
1,1,2-Trichloroethane	ug/l	3	< 0.08 U	< 0.08 U		< 0.08 U
1,1-Dichloroethane	ug/l	50	< 0.24 U	0.84 J		0.27 J
1,1-Dichloroethene	ug/l	1	< 0.34 U	< 0.34 U		< 0.34 U
1,2,3-Trichlorobenzene	ug/l		< 0.35 U	< 0.35 U		< 0.35 U
1,2,4-Trichlorobenzene	ug/l	9	< 0.27 U	< 0.27 U		< 0.27 U
1,2-Dibromo-3-Chloropropane (DBCP)	ug/l	0.02	< 0.007 U	< 0.007 U		< 0.007 U
1,2-Dibromoethane	ug/l	0.03	< 0.006 U	< 0.006 U		< 0.006 U
1,2-Dichlorobenzene	ug/l	600	< 0.22 U	< 0.22 U		0.41 J
1,2-Dichloroethane	ug/l	2	< 0.25 U	< 0.25 U		< 0.25 U
1,2-Dichloropropane	ug/l	1	< 0.18 U	< 0.18 U		< 0.18 U
1,3-Dichlorobenzene	ug/l	600	< 0.33 U	< 0.33 U		1.3
1,4-Dichlorobenzene	ug/l	75	< 0.33 U	0.63 J		3.6
2-Butanone (MEK)	ug/l	300	< 2.2 U	< 2.2 U		< 2.2 U
2-Hexanone	ug/l	300**	< 0.72 U	< 0.72 U		< 0.72 U
4-methyl-2-pentanone (MIBK)	ug/l		< 0.63 U	< 0.63 U		< 0.63 U
Acetone	ug/l	6000	< 1.1 U	< 1.1 U		< 1.1 U
Benzene	ug/l	1	< 0.09 U	6.4		25
Bromodichloromethane	ug/l	1	< 0.15 U	< 0.15 U		< 0.15 U
Bromoform	ug/l	4	< 0.18 U	< 0.18 U		< 0.18 U
Bromomethane	ug/l	10	< 0.18 U	< 0.18 U		< 0.18 U
Carbon disulfide	ug/l	700	< 0.22 U	< 0.22 U		0.64 J
Carbon tetrachloride	ug/l	1	< 0.33 U	< 0.33 U		< 0.33 U
Chlorobenzene	ug/l	50	< 0.24 U	1.1		13
Chlorobromomethane	ug/l		< 0.3 U	< 0.3 U		< 0.3 U
Chloroethane	ug/l	5**	< 0.37 U	48		23
Chloroform	ug/l	70	< 0.22 U	< 0.22 U		< 0.22 U
Chloromethane	ug/l		< 0.22 U	< 0.22 U		< 0.22 U
cis-1,2-Dichloroethene	ug/l	70	< 0.26 U	0.39 J		0.34 J
cis-1,3-Dichloropropene	ug/l		< 0.16 U	< 0.16 U		< 0.16 U
Cyclohexane	ug/l		< 0.26 U	2		2 *
Dibromochloromethane	ug/l	1	< 0.22 U	< 0.22 U		< 0.22 U
Dichlorodifluoromethane	ug/l	1000	< 0.14 U	< 0.14 U		< 0.14 U
Ethylbenzene	ug/l	700	< 0.3 U	< 0.3 U		1.7
Freon 113	ug/l	20000**	< 0.34 U	< 0.34 U		< 0.34 U
Isopropylbenzene	ug/l	700	< 0.32 U	1.9		7
Methyl acetate	ug/l	7000	< 0.58 U	< 0.58 U		< 0.58 U
Methyl tert butyl ether	ug/l	70	< 0.13 U	< 0.13 U		< 0.13 U
Methylcyclohexane	ug/l		< 0.22 U	0.83 J		0.47 J *
Methylene chloride	ug/l	3	< 0.21 U	< 0.21 U		< 0.21 U
Styrene	ug/l	100	< 0.17 U	< 0.17 U		< 0.17 U
Tetrachloroethene	ug/l	1	< 0.12 U	< 0.12 U		< 0.12 U
Toluene	ug/l	600	< 0.25 U	< 0.25 U		0.25 J
Trans-1,2-dichloroethene	ug/l	100	< 0.18 U	< 0.18 U		< 0.18 U
trans-1,3-Dichloropropene	ug/l		< 0.19 U	< 0.19 U		< 0.19 U
Trichloroethene	ug/l	1	< 0.22 U	< 0.22 U		< 0.22 U
Trichlorofluoromethane	ug/l	2000	< 0.15 U	< 0.15 U		< 0.15 U
Vinyl Chloride	ug/l	1	< 0.06 U	< 0.06 U		< 0.06 U
Xylenes	ug/l	1000	< 0.28 U	1.3 J		7.7
1,4-Dioxane *	ug/l	0.4**	< 0.15 U	5	6.2	15
Tentatively Identified Compounds (TICs)						
None						
See Table 5 for validation qualifiers.						
* Analyzed via Method 8270 SIM						
** Interim GWQC (NJAC7:9C Nov. 25, 2015)						
Result exceeds NJGWQS (NJAC 7:9B April 2011) or Interim GWQC (NJAC 7:9C Nov. 25, 2015)						

TABLE 4A
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOCS) AND 1,4-DIOXANE IN SURFACE WATER
MAY/JUNE 2016
RINGWOOD MINES/LANDFILL SUPERFUND SITE

TABLE 4B
 SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) AND 1,4-DIOXANE IN SURFACE WATER
 MAY/JUNE 2016
 RINGWOOD MINES/LANDFILL SUPERFUND SITE

Table 5
CADENA Data Validation Qualifiers

Validation Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

Table 6A

Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
OB-01	OB-1(110104)	5-31'	11/1/2004	< 1.0		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-1 (123004)		12/30/2004	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-1 (9/26/2006)		9/26/2006	< 0.21		<1	< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
	OB-1(040607)		4/6/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-1(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-1(080430)		4/30/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-1(080908)		9/8/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-1(070209)		7/2/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-1(102209)		10/22/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-1(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-1 (052011)		5/20/2011	< 0.26		<1	< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
	OB-1 (042612)		4/26/2012	< 0.22	NA	<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
OB-02	OB-2 (10/13/04)	8-42'	10/13/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-2 (10/2/2006)		10/2/2006	< 0.21		<1	< 1.5	< 2.6	2.0	< 2.6	NA	NA
	OB-2(040607)		4/6/2007	< 0.21		<1	< 1.5	3.2	< 1.5	< 2.8	NA	NA
	OB-2(071008)		10/8/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-2(080428)		4/28/2008	< 0.26		<1	< 1.7	1.8 B	< 1.7	< 1.4	NA	NA
	OB-2 (080917)		9/17/2008	< 0.26		<1	< 1.7	< 1.4	1.7 B	< 1.4	NA	NA
	OB-2(063009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-2(102009)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-2(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-2(051611)		5/16/2011	< 0.26		<1	< 0.92	1.3 B	< 0.92	< 1.1	NA	NA
	OB-2 (041912)		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-2 (111813)		11/18/2013	< 0.28		<1	< 1.5	2.6 B	< 1.5	< 2.4	NA	NA
	OB-2(091514)		9/15/2014	< 0.21		<1	< 2.6	< 1.3	< 3.0 B	< 1.3	NA	NA
	OB-2(081215)		8/12/2015	<0.2	<0.27	<1	1.2 UB	<0.2	<0.5	<0.2	NA	NA
OB-03	OB-3 (10/13/04)	9-24'	10/13/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-3		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-3(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-3(071008)		10/8/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-3(080428)		4/28/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-3(080909)		9/9/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-3(063009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-3(102009)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-3(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-3(151711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-3(042312)		4/23/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-3(042312) DUP		4/23/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-3 (111513)		11/15/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-3(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-3(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
OB-04	OB-4 (10/14/04)	28-61'	10/14/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-4		9/29/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-4(040607)		4/6/2007	< 0.21		<1	< 1.5	4.1	< 1.5	< 2.8	NA	NA
	OB-4(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-4(080428)		4/28/2008	< 0.26		<1	< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
	OB-4(080910)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-4(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-4(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-4(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-4(051711)		5/17/2011	< 0.26		<1	1.1 B	1.2 B	< 0.92	< 0.94	NA	NA
	OB-4 (042712)		4/27/2012	< 0.22		<1 J	< 0.97	1.9 J	< 0.97	< 1.7	NA	NA
	OB-4 (111313)		11/13/2013	< 0.28		<1	1.7 B	< 3.9 B	2.2 B	< 3.4 B	NA	NA
	OB-4(091514)		9/15/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-4(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
	OB-5 (10/15/04)		10/15/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
OB-05	OB-5 (10/2/2006)	18-63'	10/2/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	2.6 B	NA	NA
	OB-5(040407)		4/4/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-5(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-5(080428)		4/28/2008	< 0.26		<1	< 1.7	1.5 B	< 1.7	1.4 B	NA	NA
	OB-5(080909)		9/9/2008	< 0.26		<1	< 1.7	1.7 B	< 1.7	< 1.4	NA	NA
	OB-5(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-5(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-5(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-5(051711)		5/17/2011	< 0.26		<1	< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
	OB-5 (041912)		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-5 (041912) DUP		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-5(111113)		11/11/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-5(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-5(080105)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
OB-06	OB-6 (11/2/04)	10-36'	11/2/2004	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-6 (123004)		12/30/2004	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-6		9/26/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-6(040607)		4/6/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-6(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-6(080501)		5/1/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	1.9 B	NA	NA
	OB-6(080908)		9/8/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-6(070209)		7/2/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-6 (111513)		11/15/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-6(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-6(080615)		8/6/2015	<0.2	<0.27	<1	<0.7 B	<0.2	<0.2 B	<0.2	NA	NA
OB-07	OB-7 (101304)	14-42'	10/13/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	REP101304		10/13/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-7		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB7(041107)		4/11/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-7(071009)		10/9/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-7(080430)		4/30/2008	< 0.26		<1	< 1.7	2.9 B	2.0 B	1.9 B	NA	NA
	OB-7(080910)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-7(080910) DUP		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-7(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-7(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-7(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-7(052510) DUP		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-7(051711)		5/17/2011	< 0.26		<1	< 0.92	1.2 B	< 0.92	1.3 B	NA	NA
	OB-7 (041912)		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	DUP (111213)		11/12/2013	< 0.28		<1	< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
	OB-7 (111213)		11/12/2013	< 0.28		<1	< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
	OB-7 (090514)		9/5/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP (090514)		9/5/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-7(082415)		8/24/2015	<0.2	<0.27	<1	<0.57 J	<0.2	<0.5	<0.2	NA	NA
OB-10	OB-10 (10/14/04)	10-20'	10/14/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-10 (10/2/2006)		10/2/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-10 (040207)		4/2/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-10 (071012)		10/12/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-10(080429)		4/29/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-10(080910)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-10(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(102109) DUP		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-10(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-10(051711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-10(051711) DUP		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-10 (042012)		4/20/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
	OB-10 (111413)		11/14/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-10(090914)		9/9/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP(090914)		9/9/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-10(081415)		8/14/2015	<0.2	<0.27	<1	<1.3 B	<0.2	<0.5	<0.2	NA	NA
OB-11	OB-11(10/14/04)	25-40'	10/14/2004	1.2		2.6	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
OB-11R	OB-11R(061110)	25-40'	6/11/2010	5.2		39.1	24.9	< 1.9	3.8	< 1.9	NA	NA
	OB-11R(051811)		5/18/2011	3.7		20.2	23.9	7.4	19.5	2.4 B	NA	NA
	OB-11R (042612)		4/26/2012	3.7		37.9 J	21.0	4.5	7.5 J	3.7 J	NA	NA
	OB-11R (110813)		11/8/2013	4.7		30.2	25.3	< 2.4	7.3	< 2.4	NA	NA
	OB-11R (091114)		9/11/2014	3.5		21.2	26.6	< 1.3	6.1	< 1.3	31.2	0.4 J
	DUP (091114)		9/11/2014	NA		NA	NA	NA	NA	NA	31	< 0.2
	OB-11R (032015)		3/20/2015	3.2		24.3	NA	NA	NA	NA	NA	NA
	OB-11R (042115)		4/21/2015	2.9		21.2	NA	NA	NA	NA	NA	NA
	OB-11R (060115)		6/1/2015	2.9		22	NA	NA	NA	NA	NA	NA
	OB-11R (080615)		8/6/2015	2.9	4.3J	23	25 B	<0.2	<0.89 B	<0.2	NA	NA
	OB-11R (121515)		12/15/2015	3.1	1.3	30	NA	NA	NA	NA	NA	NA
	OB-11R (052516)		5/25/2016	2.4	1.8	19	NA	NA	NA	NA	NA	NA
	DUP2 (052516)		5/25/2016	2.5	1.6	20	NA	NA	NA	NA	NA	NA
OB-12	OB-12 (1101/04)	9-40'	11/1/2004	< 1.0		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-12 (123004)		12/30/2004	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-12		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-12(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-12(071008)		10/8/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-12(080428)		4/28/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-12(080909)		9/9/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-12(063009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(063009) DUP		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(102009)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-12(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-12(051711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-12 (041912)		4/19/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-12 (111813)		11/18/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-12(091514)		9/15/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-12(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
OB-13	OB-13 (10/13/04)	8-60'	10/13/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-13		10/3/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-13(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-13(071008)		10/8/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	OB-13(080428)		4/28/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-13(080910)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-13(070109)		7/1/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-13(102109)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-13(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-13(051711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-13 (042012)		4/20/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-13 (111313)		11/13/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-13(090814)		9/8/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-13(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
OB-14A	OB-14A (10/12/04)	4-14'	10/12/2004	< 0.50		<2	16.7	< 3.0	19.6	< 3.0	NA	NA
	OB-14A		9/27/2006	< 0.21		<1	4.5 J	< 2.6	5.5 J	< 2.6	NA	NA
	OB-14A(040907)		4/9/2007	< 0.21		<1	2.4	3.3	< 1.5	2.9 B	NA	NA
	OB-14A (071011)		10/11/2007	< 0.19		<1	23.1	1.4 B	5.6	< 0.94	NA	NA
	DUP (071011)		10/11/2007	< 0.19		<1	21.6	1 B	5	1.2 B	NA	NA
	OB-14A(080430)		4/30/2008	< 0.26		<1	14.4	4.0	3.8	2.7 B	NA	NA
	OB-14A(080911)		9/11/2008	< 0.26		<1	2.3 BJ	< 1.4	< 1.7	< 1.4	NA	NA
	OB-14A(070609)		7/6/2009	< 0.23		<1	< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
	OB-14A(102309)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

Table 6A
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
	OB-14A(052810)		5/28/2010	< 0.23		<1	1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
	OB-14A(051911)		5/19/2011	< 0.26		<1	< 0.92	3.8 J	< 0.92	< 3.0	NA	NA
	OB-14A(041812)		4/18/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-14A (110613)		11/6/2013	< 0.28		<1	2.8 B	< 3.6 B	< 1.5	< 2.4	NA	NA
	OB-14A(090314)		9/3/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-14A(091114)		9/11/2014	< 0.21		<1	4.8	< 1.3	3.5	< 1.3	5.2	0.5 J
	OB-14A(081315)		8/13/2015	<0.02	<0.27	<1	9.2	0.86 J	1.1 J	<0.2	NA	NA
	OB-14A(052316)		5/23/2016	<1	<0.42	<1	NA	NA	NA	NA	NA	NA
OB-14B	OB-14B (10/12/04)	25-35'	10/12/2004	< 0.50		<2	< 5.0	3.6	< 5.0	< 3.0	NA	NA
	OB-14B		9/27/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-14B(040907)		4/9/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-14B (071011)		10/11/2007	< 0.19		<1	2.8 B	1.1 B	1.6 B	< 0.94	NA	NA
	OB-14B(080430)		4/30/2008	< 0.26		<1	2.1 B	3.2	< 1.7	2.1 B	NA	NA
	OB-14B(080911)		9/11/2008	< 0.26		<1	2 BJ	< 1.4	2.6 BJ	< 1.4	NA	NA
	OB-14B(070609)		7/6/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-14B(102309)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-14B(052810)		5/28/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-14B(051911)		5/19/2011	< 0.26		<1	1.6 J	4.8 J	< 0.92	< 3.0	NA	NA
	OB-14B(041812)		4/18/2012	< 0.22		<1	< 3	< 1.7	< 0.97	< 1.7	NA	NA
	OB-14B (110613)		11/6/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-14B(091114)		9/11/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-14B(081315)		8/13/2015	<0.2	<0.27	<1	2.5	<0.2	1.1 J	<0.2	NA	NA
	OB-14B(052316)		5/23/2016	<1	0.18 J	<1	NA	NA	NA	NA	NA	NA
OB-15B	OB-15B (10/12/04)	25-35'	10/12/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-15B		10/3/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-15B(041207)		4/12/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-15B(071016)		10/16/2007	< 0.19		<1	< 1.1	1.0 B	< 1.1	< 0.94	NA	NA
	OB-15B(080502)		5/2/2008	< 0.26		<1	< 1.7	2.6 B	< 1.7	2.1 B	NA	NA
	OB-15B(080916)		9/16/2008	< 0.26		<1	1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	OB-15B(070609)		7/6/2009	< 0.23		<1	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	OB-15B(102609)		10/26/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-15B(061110)		6/11/2010	< 0.23		<1	3.2	2.0 B	< 1.4	< 1.9	NA	NA
	OB-15B(052311)		5/23/2011	< 0.22		<1	1.2 B	2.0 B	< 0.92	< 0.94	NA	NA
	OB-15B(042412)		4/24/2012	< 0.22		<1	1.5 B	< 1.7	1.4 B	< 1.7	NA	NA
	OB-15B (112013)		11/20/2013	< 0.28 J		<1 J	2.9 B	< 2.4	< 1.5	< 2.4	NA	NA
	OB-15B (090514)		9/5/2014	< 0.21		<1	< 2.6	1.4 B	< 2.6	< 1.3	NA	NA
	OB-15B (082415)		8/24/2015	<0.2	<0.27	<1	1.4 J	<0.63 B	1.1 J	<0.2	NA	NA
OB-16	OB-16 (10/12/04)	5-15'	10/12/2004	< 0.50		<2	7.6	< 3.0	6.3	< 3.0	NA	NA
	OB-16 (9/27/2006)		9/27/2006	< 0.21		<1	6.2	< 2.6	4.2	< 2.6	NA	NA
	OB-16(041007)		4/10/2007	< 0.21		<1	4.4	< 2.8	3.3	< 2.8	NA	NA
	OB-16(071010)		10/10/2007	< 0.19		<1	8.8	< 0.94	3.6	< 0.94	NA	NA
	OB-16(080501)		5/1/2008	< 0.26		<1	4.6	3.7	< 1.7	1.6 B	NA	NA
	OB-16(080911)		9/11/2008	< 0.26		<1	7.4	< 1.4	2.6 BJ	< 1.4	NA	NA
	OB-16(070809)		7/8/2009	< 0.23		<1	5.1	< 1.7	< 2.4	< 1.7	NA	NA
	OB-16(102309)		10/23/2009	NA		NA	6.1	< 1.7	< 2.4	< 1.7	NA	NA
	OB-16		10/29/2009	< 0.23		<1	NA	NA	NA	NA	NA	NA
	OB-16(052710)		5/27/2010	< 0.23		<1	7.8	< 1.9	< 1.4	< 1.9	NA	NA
	OB-16(051911)		5/19/2011	< 0.26		<1	9.1	< 3.0	6.0	< 3.0	NA	NA
	OB-16(041712)		4/17/2012	< 0.22		<1	6.9 J	< 1.7	< 3	1.8 B	NA	NA
	OB-16 (110613)		11/6/2013	< 0.28		<1	9.9	< 2.4	6.4	< 2.4	NA	NA
	OB-16 (091014)		9/10/2014	< 0.21		<1	4.7	1.3 B	< 2.6	1.8 B	12.7	0.8 J
	OB-16 (081315)		8/13/2015	<0.2	<0.27	<1	12	<0.2	2.3	<0.2	NA	NA
	OB-16 (052316)		5/23/2016	<1	<0.42	<1	NA	NA	NA	NA	NA	NA
	OB-17(10/11/04)		10/11/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-17		9/27/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-17(041007)		4/10/2007	< 0.21		<1	< 1.5	3.5	< 1.5	< 2.8	NA	NA
	OB-17(071010)		10/10/2007	< 0.19		<1	2.5 B	1.7 B	< 1.1	< 0.94	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
OB-17	OB-17(080501)	3-13'	5/1/2008	< 0.26		<1	< 1.7	2.3 B	< 1.7	2.4 B	NA	NA
	OB-17(080911)		9/11/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-17(070809)		7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-17(102309)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-17(052710)		5/27/2010	< 0.23		<1	1.9 B	< 1.9	< 1.4	< 1.9	NA	NA
	OB-17(051911)		5/19/2011	< 0.26		<1	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	OB-17(041712)		4/17/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-17 (110613)		11/6/2013	< 0.28		<1	1.9 B	< 2.4	< 1.5	< 2.4	NA	NA
	OB-17(090314)		9/3/2014	< 0.21		<1	3.5	< 1.3	< 2.6	< 1.3	NA	NA
	OB-17(081315)		8/13/2015	<0.2	17	<1	5.0 B	0.36 J	0.58 J	<0.2	NA	NA
	OB-17(052416)		5/24/2016	<1	2.9	<1	NA	NA	NA	NA	NA	NA
OB-18	OB-18 (10/14/04)	10-20'	10/11/2004	< 0.50		<2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	OB-18		9/26/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-18(041007)		4/10/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	DUP(041007) (OB-18)		4/10/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-18(071010)		10/10/2007	< 0.19		<1	< 1.1	1.2 B	< 1.1	1.0 B	NA	NA
	OB-18(080501)		5/1/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	1.8 B	NA	NA
	OB-18(080911)		9/11/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-18(070809)		7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-18(102309)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-18(052710)		5/27/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-18(051911)		5/19/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
	OB-18(041712)		4/17/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-18 (110613)		11/6/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-18(09032014)		9/3/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-18(081315)		8/13/2015	<0.2	<0.27	<1	1.4 J	<0.2	<0.5	<0.2	NA	NA
	OB-18(052316)		5/23/2016	<1	<0.42	<1	1.4 J	<0.2	<0.5	<0.2	NA	NA
OB-19	MW-19	5-20'	10/3/2006	0.55 J		3.1	3.1	9.4	< 1.5	< 2.6	NA	NA
	OB-19(040907)		4/9/2007	0.59 J		1.5	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-19(071015)		10/15/2007	< 0.19		<1	1.9 B	1.3 B	< 1.1	1.1 B	NA	NA
	DUP(071015)		10/15/2007	< 0.19		<1	1.8 B	1.0 B	< 1.1	< 0.94	NA	NA
	OB-19(080429)		4/29/2008	0.56 J		1.5	< 1.7	1.4 B	< 1.7	< 1.4	NA	NA
	OB-19(080912)		9/12/2008	0.37 J		4.3	4 J	< 1.4	< 1.7	< 1.4	NA	NA
	OB-19(070709)		7/7/2009	1.2		6.2	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-19(102709)		10/27/2009	0.39 J		1.4 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-19(060110)		6/1/2010	0.29 J		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-19 (052011)		5/20/2011	0.90 J		2.8	< 0.92	3.5	< 0.92	1.0 B	NA	NA
	OB-19 (042512)		4/25/2012	0.32 J		2.3	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-19(111113)		11/11/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-19 (090414)		9/4/2014	< 0.21		<1	6.0	< 1.3	< 2.6	< 1.3	NA	NA
	OB-19(080515)		8/5/2015	<0.2	<0.27	<1	<1.6 B	<0.44 J	<0.87 B	<0.2	NA	NA
	OB-19 (121515)		12/15/2015	1.4	1.89	8.7	NA	NA	NA	NA	NA	NA
	OB-19 (052516)		5/23/2015	1.3	1.3	6.8	NA	NA	NA	NA	NA	NA
MW-20	MW-20		10/4/2006	0.36 J		<1	13.9	< 2.6	13.1	< 2.6	NA	NA
	OB-20A(040307)		4/3/2007	0.48 J		<1	24.6	< 2.8	20.8	< 2.8	NA	NA
	OB-20A (071011)		10/11/2007	0.36 J		<1	18.6	3	2.4 B	< 0.94	NA	NA
	OB-20A(080429)		4/29/2008	< 0.26		<1	3.7	2.1 B	< 1.7	1.8 B	NA	NA
	OB-20A(080915)		9/15/2008	< 0.26		<1	7.8	< 1.4	5.3	< 1.4	NA	NA
	OB-20A(070909)		7/9/2009	< 0.23		<1	< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
	OB-20A(102809)		10/28/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20A(060210)		6/2/2010	< 0.23		<1	7.9	1.9 B	< 1.4	< 1.9	NA	NA
	OB-20A(051811)		5/18/2011	< 0.22		<1	< 0.92	5.6	< 0.92	1.0 J	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
OB-20A	OB-20A(051811) DUP	5-20'	5/18/2011	< 0.22		<1	< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
	OB-20A (042712)		4/27/2012	< 0.22		<1	< 3.0	3.0 J	< 3.0	< 1.7	NA	NA
	OB-20A (110813)		11/8/2013	< 0.28		<1	7.2	11.2 J	3.4	< 2.4	NA	NA
	DUP (110813)		11/8/2013	< 0.28		<1	5.7	< 2.4 J	2.2 B	< 2.4	NA	NA
	OB-20A (090514)		9/5/2014	< 0.21		<1	7.7	< 1.3	3.9	< 1.3	NA	NA
	OB-20A (031915)		3/19/2015	<0.21		<1	NA	NA	NA	NA	NA	NA
	OB-20A (042115)		4/21/2015	<0.24		<.5	NA	NA	NA	NA	NA	NA
	OB-20A (060115)		6/1/2015	<0.20		<1	NA	NA	NA	NA	NA	NA
	OB-20A (080515)		8/5/2015	<0.2	<0.27	<1	7.1	<0.44 J	2.0 B	<0.2	NA	NA
	OB-20A (121415)		12/14/2015	<0.09	<0.053	<1	NA	NA	NA	NA	NA	NA
	OB-20A (052616)		5/26/2016	<1	<0.42	<1	NA	NA	NA	NA	NA	NA
OB-20B	MW-20 OB-34	24-34'	10/4/2006	2.0		4.5	1.5 B	3.1	< 1.5	< 2.6	NA	NA
	REP100406		10/4/2006	1.9		3.8	1.9 B	3.5	1.6 B	< 2.6	NA	NA
	OB20B(040507)		4/5/2007	1.4		1.8	1.5 B	< 2.8	< 1.5	2.9 B	NA	NA
	DUP(040507) (OB20B)(040507)		4/5/2007	1.5		1.8	< 1.5	< 2.8	< 1.5	3.6	NA	NA
	OB-20B (071011)		10/11/2007	1.5		2.8	1.2 B	1.1 B	< 1.1	1 B	NA	NA
	OB-20B(080429)		4/29/2008	1.4		2.1	< 1.7	3.8	< 1.7	2.4 B	NA	NA
	OB-20B(080915)		9/15/2008	0.90 J		1.9	3.8	< 1.4	< 1.7	< 1.4	NA	NA
	OB-20B(070909)		7/9/2009	0.83 J		1.6	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20B(102809)		10/28/2009	0.77 J		1.2	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-20B(060210)		6/2/2010	1.1		1.3	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-20B(051811)		5/18/2011	0.86 J		1.5	< 0.92	2.5 B	< 0.92	2.2 B	NA	NA
	OB-20B (042712)		4/27/2012	0.66 J		1.6 J	< 0.97	2.8 J	< 0.97	< 1.7	NA	NA
	OB-20B (110813)		11/8/2013	0.52 J		1.5	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-20B (090514)		9/5/2014	0.37 J		1.1	2.7 B	< 1.3	2.9 B	< 1.3	NA	NA
	OB-20B(100914)		10/9/2014	0.40 J		1.6	3.9	< 1.3	3.1	< 1.3	NA	NA
	OB-20B(100914)		10/9/2014	0.40 J		1.5	3.4	< 1.3	3.7	< 1.3	NA	NA
	OB-20B(031915)		3/19/2015	0.46J		3.6	NA	NA	NA	NA	NA	NA
	OB-20B(042115)		4/21/2015	0.36J		2.4	NA	NA	NA	NA	NA	NA
	OB-20B(060115)		6/1/2015	0.27J		1.7	NA	NA	NA	NA	NA	NA
	OB-20B(080515)		8/5/2015	0.27 J	0.95J	1.8	1.5 J	0.28 J	<1.1 B	<0.2	NA	NA
	OB-20B(121415)		12/14/2015	0.5J	1.25	4.4	NA	NA	NA	NA	NA	NA
	DUP(121415)		12/14/2015	0.51J	1.37	6.7	NA	NA	NA	NA	NA	NA
	OB-20B(052416)		5/25/2016	0.28 J	1	2.6	NA	NA	NA	NA	NA	NA
OB-21	MW-21	6-21'	10/5/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	REP100506		10/5/2006	< 0.21		NA	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	OB-21(040907)		4/9/2007	< 0.21		<1	10.4	29.2	< 1.5	< 2.8	NA	NA
	OB-21(071015)		10/15/2007	< 0.19		<1	9.0 B	27.0	< 1.1	< 0.94	NA	NA
	OB-21(080429)		4/29/2008	< 0.26		<1	< 1.7	2.1 B	< 1.7	< 1.4	NA	NA
	OB-21(080912)		9/12/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	OB-21(070709)		7/7/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(070709) DUP		7/7/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(102709)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-21(060110)		6/1/2010	< 0.23		<1	< 1.4	2.5 B	< 1.4	< 1.9	NA	NA
	OB-21(051811)		5/18/2011	< 0.22		<1	< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
	OB-21(042412)		4/24/2012	< 0.22		<1	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
	OB-21 (110713)		11/7/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-21 (090414)		9/4/2014	< 0.21		<1	2.9 B	< 1.3	< 2.6	< 1.3	NA	NA
	DUP (090414)		9/4/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-21(042015)		4/20/2015	<0.24		<.5	NA	NA	NA	NA	NA	NA
	OB-21(080615)		8/16/2015	<0.2	<0.27	<1	<1.4 B	1.8 J	<0.56 B	0.24 J	NA	NA
OB-22	OB-22	10-20'	11/30/2006	< 0.21		<1	9.5	19.5	< 1.5	< 2.8	NA	NA
	OB-22(040407)		4/4/2007	< 0.21		<1	5.2	9.1	< 1.5	< 2.8	NA	NA
	OB-22(080501)		5/1/2008	< 0.26		<1	< 1.7	2.3 B	< 1.7	< 1.4	NA	NA
	OB-22(070809)		7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-22(052810)		5/28/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
	OB-22(051911)		5/19/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
	OB-22 (041912)		4/19/2012	< 0.22	NA	<1	NA	NA	NA	NA	NA	NA
OB-23	OB-23	10-20'	11/28/2006	< 0.21		<1	1.8 B	< 2.8 J	< 1.5	3.0 J	NA	NA
	OB-23(041107)		4/11/2007	< 0.21		<1	< 1.5	24.1	< 1.5	< 2.8	NA	NA
	OB-23(080502)		5/2/2008	< 0.26		<1	< 1.7	2.5 B	< 1.7	< 1.4	NA	NA
	OB-23(070809)		7/8/2009	< 0.23		<1	< 2.4	7.5	< 2.4	< 1.7	NA	NA
	OB-23(052810)		5/28/2010	< 0.23		<1	2.2 B	2.2 B	< 1.4	< 1.9	NA	NA
	OB-23(051911)		5/19/2011	< 0.26		<1	< 0.92	5.5 J	< 0.92	< 3.0	NA	NA
OB-24	OB-24	5-15'	11/28/2006	< 0.21		<1	< 1.5	2.8 B	< 1.5	< 2.8	NA	NA
	OB-24(041107)		4/11/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	OB-24(071012)		10/12/2007	< 0.19		<1	1.9 B	1.2 BJ	< 1.1	1.5 BJ	NA	NA
	OB-24(080430)		4/30/2008	< 0.26		<1	1.7 B	1.5 B	< 1.7	< 1.4	NA	NA
	DUP-02(080430) (OB-24)		4/30/2008	< 0.26		<1	< 1.7	1.6 B	1.7 B	< 1.4	NA	NA
	OB-24(080911)		9/11/2008	< 0.26		<1	2.5 BJ	< 1.4	< 1.7	< 1.4	NA	NA
	OB-24(070809)		7/8/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-24(102609)		10/26/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-24(052810)		5/28/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-24(051911)		5/19/2011	< 0.26		<1	< 0.92	4.2 J	< 0.92	< 3.0	NA	NA
	OB-24(041812)		4/18/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-24 (110613)		11/6/2013	< 0.28		<1	< 1.5	< 3.0 B	< 1.5	< 2.4	NA	NA
	DUP (110613)		11/6/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-24(090314)		9/3/2014	0.50		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-24(081315)		8/13/2015	<0.2	<0.27	<1	1.8 J	0.24 J	0.64 J	<0.2	NA	NA
	OB-24(052416)		5/24/2016	<1	<0.40	<1	NA	NA	NA	NA	NA	NA
OB-25	OB-25	10-20'	11/30/2006	< 0.21		<1	9.1 J	31.5 J	< 1.5	< 2.8	NA	NA
	REP-061130		11/30/2006	< 0.21		<1	23.1 J	59.3 J	< 1.5	< 2.8	NA	NA
	OB-25(041207)		4/12/2007	< 0.21		<1	7.1	594	< 1.5	< 2.8	NA	NA
	OB-25(071012)		10/12/2007	< 0.19		<1	1.1 B	3.1	< 1.1	1.5 B	NA	NA
	OB-25(080429)		4/29/2008	< 0.26		<1	2.1 B	13.8	< 1.7	< 1.4	NA	NA
	OB-25(080918)		9/18/2008	< 0.26		<1	19.8	45.7	< 1.7	< 1.4	NA	NA
	OB-25(070609)		7/6/2009	< 0.23		<1	8.4 J	19.9	< 2.4	< 1.7	NA	NA
	OB-25(102609)		10/26/2009	< 0.23		<1	< 2.4	4.3	< 2.4	2.0 B	NA	NA
	OB-25(060110)		6/1/2010	< 0.23		<1	1.7 B	53.6	< 1.4	< 1.9	NA	NA
	OB-25 (052011)		5/20/2011	< 0.26		<1	< 0.92	4.2	< 0.92	< 0.94	NA	NA
	OB-25 (042012)		4/20/2012	< 0.22		<1	2.1 J	17.2	< 0.97	< 1.7	NA	NA
	OB-25 (111213)		11/12/2013	< 0.28		<1	9.6 J	40.3	NA	NA	NA	NA
	OB-25 (090914)		9/9/2014	< 0.21		<1	< 2.6	3.8	< 2.6	2.2 B	NA	NA
	OB-25(081215)		8/25/2015	<0.2	<0.27	<1	4.1 B	11	1.0 J	1.0 J	NA	NA
OB-26	OB-26(080509)	9-24'	5/9/2008	< 0.26		<1	< 1.7 B	1.7 B	< 1.7 B	1.5 B	NA	NA
	OB-26(080916)		9/16/2008	< 0.26		<1	2.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	OB-26(072029)		7/2/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	OB-26(102209)		10/22/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	OB-26(052610)		5/26/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-26(051711)		5/17/2011	< 0.26		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	OB-26 (042012)		4/20/2012	< 0.22		<1	< 0.97	5.0 J	< 0.97	< 1.7	NA	NA
OB-27	OB-27(060110)	24.5-39.5'	6/1/2010	5.9		159	20.5	< 1.9	2.9 B	< 1.9	NA	NA
	OB-27(051811)		5/18/2011	6.5		176	NA	NA	NA	NA	NA	NA
	OB-27 (042512)		4/25/2012	5.5		208	21.5	< 1.7	18.0	< 1.7	NA	NA
	OB-27(111113)		11/11/2013	3.5		80.8	25.5	< 2.4	5.6	< 2.4	NA	NA
	DUP(111113)		11/11/2013	3.5		82.1	24.5	< 2.4	9.5	< 2.4	NA	NA
	OB-27 (091014)		9/10/2014	2.6		89.4	23.0	1.4 B	4.5	< 1.3	28	0.3 J
	OB-27 (032015)		3/20/2015	2.8		76.7	NA	NA	NA	NA	NA	NA
	OB-27 (042115)		4/21/2015	3.1		87.2	NA	NA	NA	NA	NA	NA
	OB-27 (060115)		6/1/2015	3.0		79	NA	NA	NA	NA	NA	NA
	OB-27(080615)		8/6/2015	3.0	6.2J	83	26 B	<0.2	<0.92 B	<0.2	NA	NA
	OB-27(121415)		12/14/2015	1.9	1.28	48 J	NA	NA	NA	NA	NA	NA

Table 6A

Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
	OB-27(050216)		5/2/2016	2.1	1.2	55	NA	NA	NA	NA	NA	NA
OB-28	OB-28(052710)	3-18'	5/27/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	OB-28(051911)		5/19/2011	< 0.26		<1	9.8	24.4	< 0.92	4.0 J	NA	NA
	OB-28(041712)		4/17/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-28 (110613)		11/6/2013	< 0.28	.	<1	< 1.5	< 4.2 B	< 1.5	< 2.4	NA	NA
	OB-28 (091014)		9/10/2014	< 0.21		<1	< 2.6	1.7 B	< 2.6	1.5 B	NA	NA
	OB-28 (081315)		8/13/2015	<0.2	<0.27	<1	1.5 J	1.0 J	0.82 J	<0.2	NA	NA
	OB-28 (081315)		8/13/2015	<0.2	<0.27	<1	1.5 J	1.0 J	0.82 J	<0.2	NA	NA
	OB-28 (052316)		5/23/2016	<1	<0.40	<1	NA	NA	NA	NA	NA	NA
OB-29	OB-29(051112)	18-35'	5/11/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-29 (111413)		11/14/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-29(090914)		9/9/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	1.6 B	NA	NA
	OB-29(081215)		8/12/2015	<0.2	<0.27	<1	<1.5 B	0.54 J	12	<0.2	NA	NA
OB-30A	OB-30A(051012)	8-18'	5/10/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
OB-30B	OB-30B(051112)	21-36'	5/11/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-30B (110713)		11/7/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-30B(090414)		9/4/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-30B (080615)		8/6/2015	<0.2	<0.27	<1	<0.89 B	<0.2	0.58 J	0.33 J	NA	NA
OB-30C	OB-30C (5/9/2012)	40-50'	5/9/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	OB-30C (110713)		11/7/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	OB-30C(090414)		9/4/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	OB-30C (080615)		8/6/2015	<0.02	<0.27	<1	2.3 B	1.3 J	1.2 J	<0.2	NA	NA
OB-31	OB-31 (052516)	23-33'	5/25/2016	<1	0.41	2.7	NA	NA	NA	NA	NA	NA
OB-32	OB-32 (052516)	10-20'	5/25/2016	<1	<0.40	<1	NA	NA	NA	NA	NA	NA
OB-33	OB-33 (052416)	66-76'	5/24/2016	<1	<0.42	<1	NA	NA	NA	NA	NA	NA
RW-1	RW-1 (110104)	10-31'	11/1/2004	< 1.0		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	RW-1(10-30)(4/1/05)		4/1/2005	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	DUP040105		4/1/2005	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	RW-1 (10-30)		10/9/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(10-31)(041807)		4/18/2007	< 0.21		<1	< 1.5	3.8	< 1.5	< 2.8	NA	NA
	RW1(10-31)		10/9/2007	< 0.19		<1	< 1.1	2.5 B	< 1.1	< 0.94	NA	NA
	RW1(11-31) (080506)		5/6/2008	< 0.26		<1	< 1.7	3.4	< 1.7	1.5 B	NA	NA
	RW1(11-31)		9/18/2008	9.8		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(10-30)	58-79'	7/17/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(11-31)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(58-78)(4/1/05)		4/1/2005	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	RW-1 (58-78)		10/9/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(58-79)(041807)		4/18/2007	< 0.21		<1	< 1.5	3.1	< 1.5	< 2.8	NA	NA
	RW1(58-79)		10/10/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
RW-1	RW1(59-79) (080506)	58-79'	5/6/2008	< 0.26		<1	< 1.7	2.0 B	< 1.7	2.2 B	NA	NA
	RW1(59-79)		9/19/2008	8.6		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW1(59-79) DUP		9/19/2008	8.4		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(58-78)		7/17/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(59-79)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(59-79) DUP		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(64-74) (6/30/2010)	64-74'	6/30/2010	< 0.23		<1	4.5	< 1.9	2.2 B	< 1.9	NA	NA
	RW-1(64-74)(052611)		5/26/2011	< 0.22		<1	4.0	< 0.94	3.2	< 3.0	NA	NA
	RW-1 (64-74)(041712)		4/17/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
RW-1	RW-1(97-117)(4/1/05)	97-118'	4/1/2005	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	RW-1 (97-117)		10/10/2006	< 0.21		<1	< 1.5	< 2.6 J	< 1.5	4.5 J	NA	NA
	RW-1(97-118)(041807)		4/18/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW1(97-118)		10/10/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-1(98-118) (5/7/2008)		5/7/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	DUP-03(080507) (RW-1(98-118))		5/7/2008	< 0.26		<1	< 1.7	1.9 B	< 1.7	2.6 B	NA	NA
	RW1(98-118)		9/19/2008	2.0		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(97-117)		7/17/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

Table 6A

Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
RW-1	RW-1(98-118)	125-151'	10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(125.5-151) (3/30/05)		3/30/2005	< 0.31		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	RW-1 (125-145)		10/10/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-1(125-146)(041807)		4/18/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW1(125-146)		10/10/2007	< 0.19		<1	< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
	RW-1(126-146) (5/7/08)		5/7/2008	< 0.26		<1	< 1.7	2.1 B	< 1.7	2.2 B	NA	NA
	RW-1 (126-146)		9/22/2008	6.2		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-1(126-146) (7/17/2009)		7/17/2009	< 0.23		<1	< 2.4	2.3 B	< 2.4	< 1.7	NA	NA
	RW-1(126-146)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-1(131-141) (6/30/2010)	131-141'	6/30/2010	< 0.23		<1	< 1.4	< 1.9	2.5 B	4.9	NA	NA
	RW-1(131-141)(052611)		5/26/2011	< 0.22		<1	2.3 B	< 0.94	1.0 B	< 0.94	NA	NA
	RW-1 (131-141)(041712)		4/17/2012	< 0.22		<1	3 J	< 1.7	< 3	< 1.7	NA	NA
	RW-1(131-141)		6/26/2012	NA		NA	NA	NA	NA	NA	NA	NA
RW-2	RW-2 (19.0-48.5')	19-20'	10/26/2004	< 1.0		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	RW2-(19-49)		10/4/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-2(19-50)((041007)		4/10/2007	< 0.21		<1	< 1.5	4.1	< 1.5	< 2.8	NA	NA
	RW2(19-50)		10/15/2007	< 0.19		<1	< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
	RW-2(20-50) (5/1/2008)		5/1/2008	< 0.26		<1	< 1.7	4.3	< 1.7	2.9 B	NA	NA
	RW2(20-50)		9/16/2008	7.4		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-2(20-50) (7/10/2009)		7/10/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) DUP		7/10/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) (10/26/2009)		10/26/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(20-50) (10/26/2009) DUP		10/26/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2 (102.5-132.0')	102-133	10/26/2004	< 1.0		<1	< 5.0	7.3	< 5.0	< 3.0	NA	NA
	RW2-(102-132)		10/4/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	3.2	NA	NA
	RW-2(102-133)(041007)		4/10/2007	< 0.21		<1	< 1.5	11.2	< 1.5	< 2.8	NA	NA
	RW2(102-133)		10/15/2007	< 0.19		<1	< 1.1 J	< 0.94	1.1 BJ	< 0.94	NA	NA
	RW-2(103-133) (5/1/2008)		5/1/2008	< 0.26		<1	< 1.7	5.4	< 1.7	2.1 B	NA	NA
	RW-2 (103-133)		9/17/2008	43.8		<1	1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
	RW-2 (102-133) (7/13/2009)		7/13/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-2(103-133)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
RW-2	RW-2 (161.0'-190.5')	161-192'	10/27/2004	< 1.0		<1	< 5.0	64.6	< 5.0	< 3.0	NA	NA
	RW-2(161-192)		4/16/2007	< 0.21		<1	< 1.5	14.0	< 1.5	< 2.8	NA	NA
	RW2(161-192)		10/16/2007	< 0.19		<1	< 1.1	1.4 B	< 1.1	< 0.94	NA	NA
	RW-2 (162-192)		7/13/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-2(162-192)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2 (278'-307.5')	278-309'	10/27/2004	< 1.0		<1	< 5.0	7.6 J	< 5.0	< 3.0	NA	NA
	REP102704		10/27/2004	< 1.0		<1	< 5.0	26.4 J	< 5.0	3.2	NA	NA
	RW-2 (278-308)		10/6/2006	< 0.21		<1	< 1.5	2.8 B	< 1.5	3.6	NA	NA
	RW-2(278-309)(041707)		4/17/2007	< 0.21		<1	< 1.5	5.9	< 1.5	5.2	NA	NA
	RW2(278-309)		10/16/2007	< 0.19		<1	< 1.1	3.2	< 1.1	< 0.94	NA	NA
	RW-2(279-309) (9/11/2008)		9/11/2008	< 6		<1	< 1.7	21.2	< 1.7	< 1.4	NA	NA
	RW-2 (279-309) (7/13/2009)		7/13/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(279-309)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(279-289)		6/29/2010	< 0.23		<1	3.0	< 1.9	3.7	< 1.9	NA	NA
	RW-2(279-289)(052411)		5/24/2011	< 0.22		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-2(279-289)(050812)		5/8/2012	< 0.22		<1	< 0.97	< 1.7	1.3 J	< 1.7	NA	NA
	RW-2 (279-289)(111913)		11/19/2013	< 0.28		<1	3.8	< 2.4	< 1.5	< 2.4	NA	NA
	RW-2(279-289)(092614)		9/26/2014	< 0.21		<1	5.2	< 1.3	4.1	< 1.3	NA	NA
	RW-2(279-289)(082115)		8/21/2015	0.22 J	10	<1	1.9 J	<0.2	2.1	<0.2	NA	NA
RW-2	RW-2 (441-470.5')	441-472'	10/28/2004	< 1.0		<1	6.8	45.5	< 5.0	9.3	NA	NA
	RW-2(441-472) (4/17/2007)		4/17/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW2(441-472)		10/17/2007	< 0.19		<1	1.3 B	3.3	< 1.1	< 0.94	NA	NA
	RW-2 (442-472)		5/5/2008	< 0.26		<1	< 1.7	22.2	< 1.7	3.9	NA	NA
	RW-2(441-472) (7/14/2009)		7/14/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(441-472)		10/28/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-2(452-462) (6/29/2010)		6/29/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
	RW-2(452-462)		6/3/2011	0.24 J		<1	< 3.0	< 3.0	2.2 J	< 3.0	NA	NA
	RW-2(452-462)(051012)		5/10/2012	0.23 J		<1	2.5 B	< 1.7	< 3.0	< 1.7	NA	NA
	RW-2 (452-462)(111913)		11/19/2013	< 0.28		<1	< 1.5	< 2.4	3.4	< 2.4	NA	NA
	RW-2(452-462)(092614)		9/26/2014	< 0.21		<1	8.3	5.8	7.2	1.8 B	NA	NA
	RW-2(452-462)(082515)		8/25/2015	0.24 J	4.7J	<1	5.4	0.2 J	5.6 J	<0.2	NA	NA
RW-3	RW-3 (65-100')	62-100'	10/29/2004	< 1.0		<1	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	RW-3(65-100)		9/29/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-3(62-98)(040507)		4/5/2007	< 0.21		<1	< 1.5	3.0	< 1.5	< 2.8	NA	NA
	RW3(62-98)		10/12/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-3(62-98) (4/30/2009)		4/30/2008	< 0.26		<1	< 1.7	4.7	< 1.7	2.3 B	NA	NA
	RW3 (62-98)		9/8/2008	< 0.26		<1	< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
	RW-3(62-98) (7/6/2009)		7/6/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-3(62-98)		10/19/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-3(77-87)		6/28/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3(052511)		5/25/2011	< 0.22		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-3 (77-87)(042612)		4/27/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-3(77-87)(111113)		11/11/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-3(77-87)(091514)		9/15/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-3(77-87)(080615)		8/6/2015	<0.2	22	<1	<0.88 B	0.26 J	<0.5	<0.2	NA	NA
	RW-3(77-87)(121815)		12/18/2015	<0.09	8.27	<1	NA	NA	NA	NA	NA	NA
	RW-3 (052716)		5/27/2016	<1	8.6	<1	NA	NA	NA	NA	NA	NA
	RW-3 (052716)		5/27/2016	<1	6.3	<1	NA	NA	NA	NA	NA	NA
RW-3D	RW-3D(140-165)	140-165'	6/9/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(140-165) DUP		6/9/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(140-165)(052411)		5/24/2011	< 0.22		2.9	< 0.92	1.5 B	< 0.92	< 0.94	NA	NA
	RW-3D(170-181)	170-181'	6/9/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-3D(170-181)(052411)		5/24/2011	< 0.22		2.7	< 0.92	1.9 B	< 0.92	< 0.94	NA	NA
	RW-3D(170-181)(052411) DUP		5/24/2011	< 0.22		2.9	1.6 B	1.5 B	< 0.92	< 0.94	NA	NA
RW-3DD	RW-3DD (175-180)(043012)	175-180'	4/30/2012	< 0.22		<1	10.4	< 1.7	5.4	< 1.7	NA	NA
	RW-3DD (175-180)(111213)		11/12/2013	< 0.28		<1	21.4	< 2.4	23.1	< 2.4	NA	NA
	RW-3DD (175-180)(091214)		9/12/2014	1.1		<1	13.6 J	< 1.3	18.7 J	< 4.5 B	19.2	18
	RW-3DD (175-180)(081015)		8/10/2015	0.44 J	20	<1	20	<0.2	19	<0.2	NA	NA
	RW-3DD (175-180)(121715)		12/17/2015	0.25J	8.95	<1	NA	NA	NA	NA	NA	NA
	RW-3DD (175-180)(053116)		5/31/2016	0.25J	4.9	<1	NA	NA	NA	NA	NA	NA
RW-3DS	RW-3DS (155-160)(043012)	155-160'	4/30/2012	< 0.22		<1	7.4	< 1.7	3.3	< 1.7	NA	NA
	RW-3DS (155-160)(111213)		11/12/2013	< 0.28		<1	< 5.9 B	3.5	8.1 J	< 3.0 B	NA	NA
	RW-3DS (155-160)(091114)		9/11/2014	< 0.21		<1	9.6	< 1.3	11.8	< 1.3	NA	NA
	RW-3DS (155-160)(082515)		8/25/2015	<0.2	38J	<1	12	<0.2	14	< 1	NA	NA
	RW-3DS (155-160)(121715)		12/17/2015	0.12J	5.25	<1	NA	NA	NA	NA	NA	NA
	RW-3DS (155-160)(052716)		5/27/2016	0.093 J	3.3	<1	NA	NA	NA	NA	NA	NA
RW-4	RW-4 (56.5-75.5')	56-77'	10/22/2004	< 0.31		<1	< 5.0	4.4	< 5.0	< 3.0	NA	NA
	RW-4 (57-77)		10/2/2006	< 0.21		<1	< 1.5	6.3	< 1.5	< 2.6	NA	NA
	RW-4(56-77)(040607)		4/6/2007	< 0.21		<1	< 1.5	5.0	< 1.5	< 2.8	NA	NA
	RW4 (56-77)		10/11/2007	< 0.19		<1	< 1.1	1.6 B	< 1.1	< 0.94	NA	NA
	RW-4(57-77) (4/28/2008)		4/28/2008	< 0.26		<1	< 1.7	3.4	< 1.7	< 1.4	NA	NA
	RW4(57-77)		9/15/2008	14.3		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(56-77)		6/30/2009	< 0.23		<1	< 2.4	3.4 J	< 2.4	< 1.7	NA	NA
	RW-4(57-77)		10/21/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (108-127')	108-129'	10/22/2004	< 0.31		<1	< 5.0	18.6	< 5.0	< 3.0	NA	NA
	RW-4 (108-128)		10/2/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-4(108-129)		4/9/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW4 (108-129)		10/11/2007	< 0.19		<1	< 1.1	< 0.94	1.5 B	< 0.94	NA	NA
	RW-4(108-128) (4/29/2008)		4/29/2008	< 0.26		<1	< 1.7	3.1	< 1.7	< 1.4	NA	NA
	RW4(108-128)		9/16/2008	3.3		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(108-128) (6/30/2009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4(108-128)		10/22/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (328-347')		10/25/2004	< 0.31		<1	< 5.0	12.6	< 5.0	< 3.0	NA	NA

Table 6A

Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
	RW-4 (328-348)	328-349'	10/3/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-4(328-349)(040907)		4/9/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW4 (328-349)		10/11/2007	< 0.19		<1	< 1.1	2.1 B	< 1.1	< 0.94	NA	NA
	RW-4(328-348) (4/29/2008)		4/29/2008	< 0.26		<1	< 1.7	2.5 B	< 1.7	1.8 B	NA	NA
	RW-4(328-348) (9/9/2008)		9/9/2008	0.30 J		<1	< 1.7	1.8 B	2.7 B	< 1.4	NA	NA
	RW-4(328-349) (7/2/2009)		7/2/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-4(328-348)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4 (333-343)		6/7/2011	< 0.05		<1	< 0.92	1.3 B	< 0.92	1.4 B	NA	NA
	RW-4 (333-343)(042512)		4/25/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4(333-343)(111113)		11/11/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-4(333-343) (090914)		9/9/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4(333-343) (082415)		8/24/2015	<0.2	<0.27	<1	0.9 J	<0.2	1.1 J	<0.2	NA	NA
RW-4	RW-4 (388-407)	388-409'	10/25/2004	< 0.31		<1	< 5.0	12.5	< 5.0	3.0	NA	NA
	RW-4 (388-408)		10/3/2006	< 0.21		<1	< 1.5	3.7	< 1.5	< 2.6	NA	NA
	RW-4(388-409)(040907)		4/9/2007	< 0.21		<1	< 1.5	3.0 B	< 1.5	< 2.8	NA	NA
	RW4 (388-409)		10/11/2007	< 0.19		<1	< 1.1	2.4 B	< 1.1	< 0.94	NA	NA
	RW-4(388-408) (4/29/2008)		4/29/2008	< 0.26		<1	< 1.7	3.3	< 1.7	< 1.4	NA	NA
	RW-4(388-408) (9/10/2008)		9/10/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-4(388-408) (7/2/2009)		7/2/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-4(388-408)		10/23/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-4(393-403) (6/8/2010)		6/8/2010	< 0.23		<1	< 1.4	3.2	< 1.4	< 1.9	NA	NA
	RW-4(393-403) (6/8/2010) DUP		6/8/2010	< 0.23		<1	< 1.4	2.7 B	< 1.4	< 1.9	NA	NA
	RW-4(393-403)		6/25/2010	< 0.23		<1	1.8 B	< 1.9	5.4	< 1.9	NA	NA
	RW-4(393-403) DUP		6/25/2010	< 0.23		<1	2.0 B	2.0 B	2.2 B	< 1.9	NA	NA
	RW-4(393-403)(052511)		5/25/2011	< 0.22		<1	< 3.0	< 3.0	< 0.92	< 3.0	NA	NA
	RW-4 (393-403)(042612)		4/26/2012	< 0.22		<1	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4(393-403)(111113)		11/11/2013	< 0.28		<1	3.6	44.6	< 1.5	< 2.4	NA	NA
	RW-4(393-403) (091014)		9/10/2014	< 0.21		<1	9.6	13.8	< 2.6	2.6 B	NA	NA
	RW-4(393-403) (081015)		8/10/2015	<0.2	<0.27	<1	0.59 J	1.8 J	< 0.5	< 0.2	NA	NA
RW-4A	RW-4A(62-72) (6/7/2010)	62-72'	6/7/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-4A(62-72)		6/25/2010	< 0.23		<1	1.5 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-4A(62-72)(052511)		5/25/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	RW-4A (62-72)(042512)		4/25/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4A (62-72)(110813)		11/8/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-4A(62-72)(091014)		9/10/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4A(62-72)(081015)		8/10/2015	<0.2	<0.27	<1	<0.5	0.44 J	<0.5	<0.2	NA	NA
	RW-4A(113-123) (6/8/2010)	113-123'	6/8/2010	< 0.23		<1	3.0	< 1.9	3.0	< 1.9	NA	NA
	RW-4A(113-123)		6/25/2010	< 0.23		<1	2.6 B	< 1.9	2.0 B	< 1.9	NA	NA
	RW-4A(113-123)(052511)		5/25/2011	< 0.22		<1	< 0.92	< 0.94	< 0.92	< 3.0	NA	NA
	RW-4A (113-123)(042512)		4/25/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-4A (113-123)(110813)		11/8/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-4A(113-123)(091014)		9/10/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-4A(113-123)(082415)		8/24/2015	<0.2	<0.27	<1	<0.5	<0.2	<0.5	<0.2	NA	NA
RW-5	RW-05(40-51)	40-51'	9/27/2006	1.0		6.5	1.7 B	68.4	< 1.5	< 2.6	NA	NA
	RW-5(40-51)(041307)		4/13/2007	1.9		14.9	< 1.5	44.3	< 0.94	< 2.8	NA	NA
	19BR-(65-75)	64-76'	5/16/2006	3.4		13.9	17.7	39.8	NA	NA	NA	NA
	RW-5(64-75)		9/29/2006	< 0.21		<1	< 1.5	24.7	< 1.5	< 7.8	NA	NA
	RW-5(65-76)(041207)		4/12/2007	1.5		15.4	< 1.5	13.9	NA	NA	NA	NA
DW-K	19BR-(100-120)	00-120'	5/17/2006	3.0		17.7	< 3.1	3.3	< 3.1	< 2.6	NA	NA
	RW-5 (100-120)		10/5/2006	1.8		18.7	4.7	32.7	< 1.5	< 2.6	NA	NA
	RW-5(97-118)		4/12/2007	2.6		22.2	< 1.5	7.0	< 1.5	4.6	NA	NA
	RW-5(071015)		10/15/2007	1.8		24	< 1.1	1.5 B	< 1.1	1.0 B	NA	NA
	RW-5(080502)		5/2/2008	0.89 J		17.8	4.1	< 1.4	< 1.7	< 1.4	NA	NA
	RW-5 (080917)		9/17/2008	0.41 J		17.6	2.4 B	< 1.4	1.8 B	< 1.4	NA	NA
	RW-5 (080917) DUP		9/17/2008	0.42 J		18.2	2.3 B	< 1.4	< 1.7	< 1.4	NA	NA
	RW-5(070709)		7/7/2009	0.26 J		18.6	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5(102709)		10/27/2009	< 0.23		7.4	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
RW-5	RW-5(060210)	35-120'	6/2/2010	NA		NA	2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-5(060410)		6/4/2010	0.24 J		9.1	NA	NA	NA	NA	NA	NA
	RW-5 (052011)		5/20/2011	< 0.26		7.2	1.1 B	< 0.94	< 0.92	1.3 B	NA	NA
	RW-5 (042612)		4/26/2012	< 0.22		5.1 J	< 3.0	1.9 J	< 3.0	< 1.7	NA	NA
	RW-5 (111413)		11/14/2013	< 0.28 J		1.9 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-5 (090414)		9/4/2014	< 0.21		1.7	9.4	4.7	7.9	1.4 B	NA	NA
	RW-5 (080515)		8/5/2015	<0.2	6.75	1.4	8.9 B	6.6	7.2 B	2.4	NA	NA
	RW-5 (121515)		12/15/2015	0.13J	3.28	1.9	NA	NA	NA	NA	NA	NA
	RW-5 (052516)		5/25/2016	<1	3.6	<1	NA	NA	NA	NA	NA	NA
RW-5A	RW-5A(071015)	54-74'	10/15/2007	< 0.19		0.79 J	< 1.1	1.9 B	< 1.1	< 0.94	NA	NA
	RW-SA(080429)		4/29/2008	< 0.26		<1	8.6	2.9 B	11.8	2.5 B	NA	NA
	RW-5A(080912)		9/12/2008	< 0.26		<1	10	2.2 BJ	9.7	< 1.4	NA	NA
	RW-5A(070709)		7/7/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5A(102809)		10/28/2009	< 0.23		<1	3.5	< 1.7	< 2.4	< 1.7	NA	NA
	RW-5A(060110)		6/1/2010	< 0.23		<1	2.6 B	< 1.9	2.7 B	< 1.9	NA	NA
	RW-5A(060110) DUP		6/1/2010	< 0.23		<1	3.6	< 1.9	2.1 B	< 1.9	NA	NA
	RW-5A(051811)		5/18/2011	< 0.22		<1	2.2 B	1.6 J	1.1 B	< 0.94	NA	NA
	RW-5A (042512)		4/25/2012	< 0.22		<1	4.9 J	< 1.7	5.9 J	< 1.7	NA	NA
	RW-5A (110813)		11/8/2013	< 0.28		<1	6.3	< 2.4	6.7	< 2.4	NA	NA
	RW-5A (091014)		9/10/2014	< 0.21		<1	7.6	2.2 B	4.7	1.8 B	10.5	1 J
	RW-5A (082415)		8/24/2015	1.2	<0.27	<1	3.3	< 0.2	1.1 J	<0.2	NA	NA
	RW-5A (121515)		12/15/2015	0.095J	<0.053	<1	NA	NA	NA	NA	NA	NA
	RW-5A (052516)		5/25/2016	<1	<0.42	<1	NA	NA	NA	NA	NA	NA
RW-6	20BR-(53-64)	53-64'	5/11/2006	2.9		6.5	< 8.0	3.2	< 8.0	< 3.0	NA	NA
	RW-06(53-64) (9/27/2006)		9/27/2006	3.0		6	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-06(53-64) (040207)		4/2/2007	2.6		6.9	1.7 B	4.5	< 1.5	2.9 B	NA	NA
	20BR-(70-81)	70-81'	5/11/2006	2.6		5.4	< 8.0	< 3.0	< 8.0	< 3.0	NA	NA
	RW-06(70-81)		9/27/2006	2.6		5.1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-06(70-81)(040307)		4/3/2007	1.9		4.5	< 1.5	32.3 J	< 1.5	< 2.8	NA	NA
RW-6	RW-6 (100-120)	98-120'	10/10/2006	4.0		15	< 1.5	6.9 J	< 1.5	3.1 J	NA	NA
	RW-6(98-119)(040507)		4/6/2007	2.7		11.2	< 1.5	4.6	< 1.5	< 2.8	NA	NA
	RW-6 (071011)		10/11/2007	2.6		8.5	2.5 B	< 0.94	1.2 B	1.3 B	NA	NA
	RW-6(080502)		5/2/2008	1.7		7.9	3.8	1.5 B	2.5 B	< 1.4	NA	NA
	RW-6(080915)		9/15/2008	2.1		7.7	2.4 B	< 1.4	2.1 B	< 1.4	NA	NA
	RW-6(070909)		7/9/2009	2.0		6.4	4.1 J	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6(102809)		10/28/2009	1.5		4.3	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6(060210)		6/2/2010	NA		NA	2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
	RW-6(060410)		6/4/2010	1.5		4.2	NA	NA	NA	NA	NA	NA
	RW-6(051811)		5/18/2011	1.6		4.5	< 0.92	1.8 J	< 0.92	2.2 B	NA	NA
	RW-6 (042712)		4/27/2012	0.74 J		2.5 J	< 3.0	2.3 J	< 0.97	2.6 J	NA	NA
	RW-6 (111813)		11/18/2013	2.3		5.9	3.6	4.9	3.2	3.6	NA	NA
	RW-6 (090514)		9/5/2014	2.1		3.5	2.6 B	1.3 B	< 2.6	< 1.3	NA	NA
	RW-6(100914)		10/9/2014	15.7		1.3	3.6	< 1.3	3.3	< 1.3	NA	NA
	RW-6(031915)		3/19/2015	344		<1	NA	NA	NA	NA	NA	NA
	RW-6(042215)		4/22/2015	2.2		1.7	NA	NA	NA	NA	NA	NA
	RW-6(060215)		6/2/2015	1.7		1.4	NA	NA	NA	NA	NA	NA
	RW-6(080515)		8/5/2015	1.2	1.5J	3.3	<1.5 B	0.25 J	<1.1 B	<0.2	NA	NA
	RW-6(121415)		12/14/2015	1.5	1.09	5.3	NA	NA	NA	NA	NA	NA
	RW-6(052616)		5/26/2016	2.1	.37 J	2.8	NA	NA	NA	NA	NA	NA
RW-6A	RW-6A(071016)		10/16/2007	5.5		2.4	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-6A(080502)		5/2/2008	1.7		1.9	2.9 B	2.8 B	< 1.7	1.8 B	NA	NA
	RW-6A(080915)		9/15/2008	2.9		2.3	1.9 B	< 1.4	1.7 B	< 1.4	NA	NA
	RW-6A(070909)		7/9/2009	1.3		1.3	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6A (102809)		10/28/2009	2.4		1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-6A(060210)		6/2/2010	1.9		1.4	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-6A(051811)		5/18/2011	1.5		0.95 J	< 0.92	3.1	< 0.92	2.4 B	NA	NA
	RW-6A (042712)		4/27/2012	2.0		1.7 J	< 0.97	1.8 J	< 0.97	< 1.7	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloro ethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
RW-6A	RW-6A (110813)	58-78'	11/8/2013	15.0		1.6	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-6A (090514)		9/5/2014	88.1		1.1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-6A (100914)		10/9/2014	6.8		1.5	< 5.1	< 1.3	< 5.1	< 1.3	NA	NA
	RW-6A (031915)		3/19/2015	13.3		2.9	NA	NA	NA	NA	NA	NA
	RW-6A (042115)		4/21/2015	8.7		2.3	NA	NA	NA	NA	NA	NA
	RW-6A (042115)		4/21/2015	9.1		1.8	NA	NA	NA	NA	NA	NA
	RW-6A (080415)		8/4/2015	7.7	2.7J	2	<1.4 B	<0.2	<1.1 B	<0.2	NA	NA
	RW-6A(121415)		12/14/2015	5.9	1.28	4.6	NA	NA	NA	NA	NA	NA
	RW-6A(052616)		5/26/2016	5.7	2.4	3	NA	NA	NA	NA	NA	NA
RW-7	21BR-(34-45)	34-45'	5/9/2006	< 0.21		<1	< 8.0	< 3.0 J	< 8.0	< 3.0 J	NA	NA
	RW-07(34-45)		9/26/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-07(34-45)(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	21BR-(49-60)	40-62'	5/9/2006	< 0.21		<1	< 8.0	< 3.0 J	< 8.0	< 3.0 J	NA	NA
	RW-07(49-60)		9/26/2006	< 0.21		<1	< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
	RW-7(49-60) (040407)		4/4/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	RW-7(071015)		10/15/2007	< 0.19		<1	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
	RW-7 (080505)		5/5/2008	< 0.26		<1	< 1.7	1.5 B	< 1.7	< 1.4	NA	NA
	RW-7(080912)		9/12/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
	RW-7(070709)		7/7/2009	< 0.23		<1	< 2.4	5.1	< 2.4	< 1.7	NA	NA
	RW-7(102709)		10/27/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-7(102709) DUP		10/27/2009	0.41 J		1.4	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-7(060110)		6/1/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-7(051811)		5/18/2011	< 0.22		<1	< 0.92	5.9	< 0.92	1.1 J	NA	NA
	RW-7(042412)		4/24/2012	< 0.22		<1	1.1 B	< 1.7	< 0.97	< 1.7	NA	NA
	RW-7 (110713)		11/7/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 4.1 B	NA	NA
	RW-7 (090415)		9/4/2014	< 0.21		<1	3.6	2.9 B	3.2	< 1.3	NA	NA
	RW-7 (042015)		4/20/2015	<0.24		<1	NA	NA	NA	NA	NA	NA
	RW-7 (080615)		8/6/2015	<0.2	<0.27	<1	<0.74 B	0.48 J	<0.72 B	<0.2	NA	NA
RW-7	21BR(80-100)	80-101'	5/10/2006	< 0.21		<1	< 8.0	< 3.0	< 8.0	< 3.0	NA	NA
	RW-07(80-100)		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-07(80-101)(040307)		4/3/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
RW-7	21BR(105-120)	103-120'	5/10/2006	< 0.21		<1	< 8.0	< 3.0	< 8.0	3.8	NA	NA
	RW-07(105-120)		9/28/2006	< 0.21		<1	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
	RW-7(103-119) (040407)		4/4/2007	< 0.21		<1	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
RW-8	RW8(42-62)	42-62'	7/31/2008	0.62 J		<1	< 1.7	4.0	< 1.7	1.9 B	NA	NA
	RW-8(42-62)		11/4/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(42-62) (7/7/2009)		7/7/2009	< 0.23		<1	< 2.4	17.9	< 2.4	5.0	NA	NA
	RW8(158-178)	158-178'	7/21/2008	< 0.26		<1	4.3	< 1.4	3.2	< 1.4	NA	NA
	RW-8(158-178) (7/7/2009)		7/7/2009	< 0.23		<1	< 2.4	6.0	< 2.4	< 1.7	NA	NA
	RW-8(158-178)		11/4/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(163-173) (6/23/2010)	163-173'	6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-8(163-173) (6/24/2010)		6/24/2010	NA		NA	NA	NA	NA	NA	NA	NA
	RW-8(163-173) (6/25/2010)		6/25/2010	NA		NA	2.1 B	< 1.9	NA	NA	NA	NA
	RW-8(163-173)(053111)		5/31/2011	< 0.22		<1	2.1 B	< 0.94	1.1 B	< 0.94	NA	NA
	RW-8(163-173)(060111)		6/1/2011	NA		NA	NA	NA	NA	NA	NA	NA
	RW-8(163-173)		5/3/2012	< 0.22		<1	2.0 J	< 1.7	1.7 J	< 1.7	NA	NA
	RW-8 (163-173)(111513)		11/15/2013	0.34 J		<1 J	2.4 B	< 3.0 B	2.0 B	< 2.4	NA	NA
	RW-8(163-173)(092214)		9/22/2014	< 0.21		<1	4.2	< 1.3	5.2	< 1.3	NA	NA
	RW-8(163-173) (081815)		8/18/2015	0.27 J	<0.27	<1	3.6 B	<0.2	2.1	< 0.2	NA	NA
	RW8(199-219)	199-219'	7/22/2008	0.38 J		<1	2.5 B	< 1.4	3.6	< 1.4	NA	NA
	RW-8(199-219) (7/7/2009)		7/7/2009	< 0.23		<1	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
	RW-8(199-219)		11/4/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	RW-8(204-214) (6/23/2010)	204-214'	6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-8(204-214) (6/25/2010)		6/25/2010	NA		NA	5.9	< 1.9	NA	NA	NA	NA
	RW-8(204-214)(060111)		6/1/2011	< 0.22		<1	5.1	< 0.94	NA	NA	NA	NA
	RW-8 (204-214)(111413)		11/14/2013	2.2 J		<1 J	1.5 B	< 2.4	NA	NA	NA	NA
	RW-8 (204-214)(111513)		11/15/2013	NA		NA	NA	NA	< 1.5	< 2.4	NA	NA

Table 6A

Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
	RW-8(204-214)(092314)		9/23/2014	0.58		<1	3.6	2.3 B	4.2	<1.3	NA	NA
	RW-8(204-214)(082015)		8/20/2015	0.57 J	<0.27	<1	2	0.97 J	1.9 J	<0.2	NA	NA
RW-9	RW9(20-40)	20-40'	7/30/2008	7.0		<1	<1.7	5.2	<1.7	2.1 B	NA	NA
	RW-9(20-40) (7/15/2009)		7/15/2009	<0.23		<1	<2.4	<3.0	<2.4	<1.7	NA	NA
	RW-9(20-40)		11/2/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW9 (80-100)	80-100'	7/23/2008	0.93 J		<1	1.7 BJ	<1.4	<1.7	<1.4	NA	NA
	DUP 1 (RW9 (80-100))		7/23/2008	1.1		<1	2.1 BJ	<1.4	2.0 B	<1.4	NA	NA
	RW-9(80-100) (7/15/2009)		7/15/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-9(80-100)		11/2/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW9 (134-154)	134-154'	7/23/2008	0.70 J		<1	<1.7 J	<1.4	2.1 BJ	<1.4	NA	NA
	RW-9(134-154) (7/16/2009)		7/16/2009	<0.23		<1	<2.4	6.4 J	<2.4	<1.7	NA	NA
	RW-9(134-154) DUP		7/16/2009	<0.23		<1	<2.4	6.4	<2.4	<1.7	NA	NA
	RW-9(134-154)		11/2/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-9 (139-149)(112013)		11/20/2013	<0.28 J		<1 J	NA	NA	NA	NA	NA	NA
	RW-9 (201-221)	201-221'	7/24/2008	1.5		<1	<1.7	<1.4	2.4 B	<1.4	NA	NA
	RW-9(201-221) (7/16/2009)		7/16/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-9(201-221)		11/3/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
RW-9	RW-9(206-216) (6/23/2010)	206-216'	6/23/2010	<0.23		<1	NA	NA	NA	NA	NA	NA
	RW-9(206-216) (6/25/2010)		6/25/2010	NA		NA	NA	NA	NA	NA	NA	NA
	RW-9(206-216)		6/28/2010	NA		NA	4.6 J	<1.9	NA	NA	NA	NA
	RW-9(206-216)(052611)		5/26/2011	<0.22		<1	NA	NA	NA	NA	NA	NA
	RW-9(206-216)(052711)		5/27/2011	NA		NA	3.3	<0.94	NA	NA	NA	NA
	RW-9 (206-216)(042012)		4/20/2012	<0.22		<1	<3.0	<1.7	<0.97	<1.7	NA	NA
	RW-9 (206-216)(112013)		11/20/2013	<0.28 J		<1 J	2.2 B	3.0	<1.5	<2.4	NA	NA
	RW-9(206-216)(092514)		9/25/2014	<0.21		<1	7.3	<1.3	8.9	<1.3	NA	NA
	RW-9(206-216)(082115)		8/21/2015	<0.2	<0.27	<1	3	<0.2	NA	NA	NA	NA
RW-9A	RW-9A(85-95)	85-95'	6/23/2010	0.33 J		<1	NA	NA	NA	NA	NA	NA
	RW-9A(85-95)(060111)		6/1/2011	<0.22		<1	NA	NA	NA	NA	NA	NA
	RW-9A (85-95)(042012)		4/20/2012	0.23 J		<1	2.8 J	<1.7	2.5 J	<1.7	NA	NA
	RW-9A (85-95)(112013)		11/20/2013	<0.28 J		<1 J	3.4	<2.4	NA	NA	NA	NA
	RW-9A(85-95)(092314)		9/23/2014	<0.21		<1	5.3	<1.3	3.7	<1.3	NA	NA
	RW-9A(85-95)(082115)		8/21/2015	<0.2	<0.27	<1	3.2	<0.2	3.4	<0.2	NA	NA
RW-10	RW-10(22-42) (7/8/2009)	22-42'	7/8/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-10(22-42)		10/29/2009	<0.23		<1	<2.4	2.2 B	<2.4	<1.7	NA	NA
	RW-10 (46-66)	46-66'	7/25/2008	<0.26		<1	2.2 B	2.8 B	2.2 B	1.6 B	NA	NA
	RW-10(46-66) (7/9/2009)		7/9/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-10(46-66)		10/29/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW10(70-90)	70-90'	7/28/2008	0.26 J		<1	2.4 B	7.3	<1.7	1.6 B	NA	NA
	RW-10(70-90) (7/9/2009)		7/9/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-10(70-90)		10/29/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW10 (115-135)	115-135'	7/28/2008	<0.26		<1	2.0 B	6.0	<1.7	1.4 B	NA	NA
	RW-10(115-135) (7/9/2009)		7/9/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-10(115-135)		10/29/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-10(120-130) (6/23/2010)		6/23/2010	<0.23		NA	NA	NA	NA	NA	NA	NA
	RW-10(120-130) (6/24/2010)		6/24/2010	NA		NA	NA	NA	NA	NA	NA	NA
	RW-10(120-130) (6/25/2010)		6/25/2010	NA		<1	4.3	<1.9	NA	NA	NA	NA
	RW-10(120-130)(053111)		5/31/2011	<0.22		NA	4.8	2.5 B	NA	NA	NA	NA
	RW-10(120-130)(060111)		6/1/2011	NA		<1	NA	NA	4.1	2.3 B	NA	NA
	RW-10 (120-130)(041912)		4/19/2012	<0.22		<1 J	3.7 J	<1.7	3.6 J	<1.7	NA	NA
	RW-10 (120-130)(111513)		11/15/2013	<0.28 J		<1	9.5	5.0 J	8.0	5.1 J	NA	NA
	RW-10(120-130)(091714)		9/17/2014	<0.21		<1	8.2	6.3	9.1	<3.0 B	8.6	8.5
	RW-10(120-130)(081915)		8/19/2015	<0.2	<0.27	<1	7.5 B	<0.2	6.7	<0.2	NA	NA
	RW-10 (180-200)		7/29/2008	0.57 J		<1	<1.7	<1.4	<1.7	<1.4	NA	NA
	RW-10(180-200) (7/9/2009)		7/9/2009	<0.23		<1	<2.4	<1.7	<2.4	<1.7	NA	NA
	RW-10(180-200)		10/30/2009	<0.23		<1	<2.4	6.0	NA	NA	NA	NA
	RW-10(180-200) DUP		10/30/2009	<0.23		<1	<2.4	7.0	<2.4	<1.7	NA	NA

Table 6A
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Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
RW-10	RW-10(180-200)MS	180-200'	10/30/2009	NA		NA	NA	NA	< 2.4	< 1.7	NA	NA
	RW-10(185-195) (6/9/2010)		6/9/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-10(185-195) (6/23/2010)		6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-10(185-195) (6/25/2010)		6/25/2010	NA		NA	2.2 B	< 1.9	NA	NA	NA	NA
	RW-10(185-195) (6/28/2010)		6/28/2010	NA		NA	NA	NA	< 1.4	< 1.9	NA	NA
	RW-10(185-195)(053111)		5/31/2011	< 0.22		<1	< 0.92	1.0 B	< 0.92	1.4 B	NA	NA
	RW-10(185-195)(041812)		4/18/2012	< 0.22		<1	3.6 J	< 1.7	3.6 J	< 1.7	NA	NA
	RW-10 (185-195)(111313)		11/13/2013	< 0.28		<1	7.9	< 4.2 B	6.6	< 3.2 B	NA	NA
	RW-10(185-195)(091714)		9/17/2014	< 0.21		<1	7.9	3.5	9.7	2.5 B	NA	NA
	RW-10(185-195)(081815)		8/18/2015	<0.2	<0.27	<1	6.7 B	<0.2	5.2	<0.2	NA	NA
RW-10A	RW-10A(51-61)(060211)	51-61'	6/2/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	RW-10A(51-61)(041812)		4/18/2012	< 0.22		<1	< 3	< 1.7	< 3	< 1.7	NA	NA
	RW-10A (51-61)(111513)		11/15/2013	< 0.28 J		<1 J	2.1 B	< 3.1 B	NA	NA	NA	NA
	RW-10A(51-61)(091814)		9/18/2014	< 0.21		<1	< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA
	RW-10A(51-61)(082015)		8/20/2015	<0.2	<0.27	<1	2.1	< 0.2	1.5 J	<0.2	NA	NA
	RW-10A(75-85) (6/9/2010)	75-85'	6/9/2010	< 0.23		<1	< 1.4	< 1.9	<0.0002	< 1.9	NA	NA
	RW-10A(75-85) (6/23/2010)		6/23/2010	< 0.23		<1	NA	NA	NA	NA	NA	NA
	RW-10A(75-85)		6/28/2010	NA		NA	< 1.4	4.0 J	< 1.4	< 1.9	NA	NA
	RW-10A(75-85)(060211)		6/2/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	RW-10A(75-85)(041812)		4/18/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-10A(75-85)(041812) DUP		4/18/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-10A(75-85)(050712)		5/7/2012	NA		NA	NA	NA	NA	NA	NA	NA
	RW-10A (75-85)(111413)		11/14/2013	< 0.28 J		<1 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-10A(75-85)(091814)		9/18/2014	< 0.21		<1	< 2.6	3.0	< 2.6	< 3.0 B	NA	NA
	RW-10A(75-85)(081815)		8/18/2015	<0.2	<0.27	<1	2 B	0.82 J	<0.5	0.26 J	NA	NA
RW-11	RW-11(100-125) (6/7/2010)	100-125'	6/7/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(100-125)		5/26/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
	RW-11(142-167) (6/7/2010)	142-167'	6/7/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(142-167)		5/26/2011	< 0.22		<1	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	RW-11(221-246) (6/8/2010)	221-246'	6/8/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(221-246)		5/25/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
RW-11D	RW-11(252-272) (6/8/2010)	252-272'	6/8/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	RW-11(252-272)		5/25/2011	< 0.22		<1	< 0.92	< 3.0	< 0.92	1.7 J	NA	NA
	RW-11D (262-267) (050112)	262-267'	5/1/2012	< 0.22		<1	NA	NA	NA	NA	NA	NA
	RW-11D (262-267)(111413)		11/14/2013	0.56 J		<1 J	< 1.5	3.3	< 1.5	< 2.4	NA	NA
	RW-11D(262-267)(091514)		9/15/2014	2.0		<1	< 3.0 B	< 1.3	< 2.6	< 1.3	NA	NA
	RW-11D(262-267)(082615)		8/26/2015	1.6	26J	<1	2.4	0.69 J	< 2.5	< 1	NA	NA
	RW-11D(262-267)(121715)		12/17/2015	2.4	17.9	<1	NA	NA	NA	NA	NA	NA
	RW-11D(262-267)(052716)		5/27/2016	3	16	1.6	NA	NA	NA	NA	NA	NA
RW-11S	RW-11S (236-241) (050112)	236-241'	5/1/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-11S (236-241)(111313)		11/13/2013	< 0.28		<1	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	RW-11S (236-241)(091214)		9/12/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	DUP(091214)		9/12/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	RW-11S (236-241)(081715)		8/17/2015	<0.2	1.1J	<1	1 J	<0.2	<0.5	<0.2	NA	NA
	RW-11S (236-241)(121715)		12/17/2015	<0.09	1.88	<1	NA	NA	NA	NA	NA	NA
	RW-11S (236-241)(052716)		5/27/2016	<1	0.60	<1	NA	NA	NA	NA	NA	NA
	RW-12(50-70)	50-70'	5/10/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
RW-12	RW-12(55-65)(091914)		9/19/2014	< 0.21		<1	< 2.6	< 3.0 B	2.6 B	< 3.0 B	NA	NA
	RW-12(55-65)(081715)		8/17/2015	<0.2		<1	13	<0.2	12	<0.2	NA	NA
	RW-12(96-116)	96-116'	5/10/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-12(125-148)	125-148'	5/11/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	RW-12(130-140)(091914)		9/19/2014	< 0.21		<1	< 2.6	< 3.0 B	2.6	< 3.0 B	NA	NA
	RW-12(130-140)(081215)		8/12/2015	<0.2	<0.27	<1	13 B	<0.2	<0.5	<0.2	NA	NA
DW-12	RW-13(71-91) (090914)		9/9/2014	< 0.21		<1	6.3	3.7	4.9	3.7	NA	NA
	RW-13(71-91) (082415)	71-91'	8/24/2015	<0.2		<1	2.9	2.3	2	<0.2	NA	NA
	RW-13(100-120)(091614)		9/16/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

Table 6A
Summary of Historical and Current Groundwater Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			NJGWQS	1	0.4**	5	3	5	3	5	3	3
RW-13	RW-13(100-120)(081315)	100-120'	8/13/2015	<0.2		<1	3.2	<0.2	2.1	<0.2	NA	NA
	RW-13(150-170)(091614)		9/16/2014	< 0.21		<1	< 2.6	1.7 B	2.9 B	< 1.3	NA	NA
	RW-13(150-170)(082115)	150-170'	8/21/2015	<0.2	<0.27	<1	4.6 B	0.33 J	2	0.31 J	NA	NA
RW-14S	RW-14S (053116)	135-153'	5/31/2016	0.22 J	0.19 J	1.9	NA	NA	NA	NA	NA	NA
RW-14D	RW-14D (053116)	175-185'	5/31/2016	0.39 J	0.17 J	3.3	NA	NA	NA	NA	NA	NA
RW-15D	RW-15D (052716)	127-137'	5/27/2016	<1	0.47	<1	NA	NA	NA	NA	NA	NA
RW-15S	RW-15S (052716)	110-120'	5/27/2016	<1	0.15 J	<1	NA	NA	NA	NA	NA	NA
RW-16	RW-16 (052416)	52-62'	5/24/2016	<1	<0.42	<1	NA	NA	NA	NA	NA	NA
SC-01	SC-1	64.4-70.9'	10/5/2006	< 0.21		<1	< 1.5	< 2.6	1.7 B	< 2.6	NA	NA
	SC1(041107)		4/11/2007	1.4		1.6	< 1.5	6.3	< 1.5	< 2.8	NA	NA
	SC-1(071016)		10/16/2007	1.5		3.6	< 1.1	8.8	< 1.1	1.6 B	NA	NA
	DUP-01(080430) (SC-1)		4/30/2008	0.93 J		1	< 1.7	6.6	< 1.7	1.9 B	NA	NA
	SC-1(080430)		4/30/2008	1.1		0.9 J	< 1.7	5.4	< 1.7	< 1.4	NA	NA
	SC-1 (080917)		9/17/2008	0.81 J		<1	< 1.7	6.2	< 1.7	< 1.4	NA	NA
	SC-1(070909)		7/9/2009	0.94 J		0.64 J	< 2.4	7.2 J	< 2.4	< 3.0	NA	NA
	SC-1(102809)		10/28/2009	0.53 J		<1	< 2.4	9.9	< 2.4	< 1.7	NA	NA
	SC-1(060210)		6/2/2010	1.5		1.1	< 1.4	6.2	< 1.4	< 1.9	NA	NA
	SC-1(051811)		5/18/2011	0.63 J		0.39 J	< 0.92	5.6	< 0.92	1.5 J	NA	NA
	SC-1 (042712)		4/27/2012	1.2		1.2 J	< 0.97	9.4	< 0.97	< 1.7	NA	NA
	SC-1(111113)		11/11/2013	1.6		<1	< 1.5	8.6	< 1.5	< 2.4	NA	NA
	SC-1 (090514)		9/5/2014	56.0		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	SC-1 (100914)		10/9/2014	1.6		<1	< 2.6	2.5 B	< 2.6	< 1.3	NA	NA
	SC-1 (031915)		3/19/2015	150		<1	NA	NA	NA	NA	NA	NA
	SC-1 (042215)		4/22/2015	1.8		1.8	NA	NA	NA	NA	NA	NA
	SC-1(060215)		6/2/2015	1.6		1.1	NA	NA	NA	NA	NA	NA
	SC-1(080415)		8/4/2015	1.3	.39J	0.53 J	1.1 B	13	<0.84 B	2	NA	NA
	SC-1(121515)		12/15/2015	2.9	1.3	2.5	NA	NA	NA	NA	NA	NA
	SC-1(052616)		5/26/2016	1.6	0.74	1.2	NA	NA	NA	NA	NA	NA
SC-02	SC-2 (080505)	47-67'	5/5/2008	< 0.26		<1	< 1.7	2.8 B	< 1.7	< 1.4	NA	NA
	SC-2 (080917)		9/17/2008	< 0.26		<1	2.1 B	< 1.4	< 1.7	< 1.4	NA	NA
	SC-2(063009)		6/30/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	SC-2(102009)		10/20/2009	< 0.23		<1	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	SC-2(052510)		5/25/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	SC-2(051611)		5/16/2011	< 0.26		<1	1.4 B	20.0	< 0.92	< 0.94	NA	NA
	SC-2 (041912)		4/19/2012	< 0.22		<1	< 0.97	2.9 J	< 0.97	< 1.7	NA	NA
	SC-2 (111513)		11/15/2013	< 0.28 J		<1 J	< 1.5	< 4.0 B	< 1.5	< 2.4	NA	NA
	SC-2(091514)		9/15/2014	< 0.21		<1	< 3.0 B	< 1.3	3.1 J	< 1.3	NA	NA
	SC-2(081215)		8/12/2015	<0.2	<0.27	<1	2.1 B	0.58 J	4.6	<0.2	NA	NA

Notes:

Results for 1,4-dioxane, benzene, chloroethane, lead, and arsenic are presented in this table. See Summary tables for full results.

Results are presented in µg/L unless otherwise noted.

¹ NJGWQS, New Jersey Groundwater Quality Standard NJAC7:9C March 2014

^{**} Interim GWQC (NJAC 7:9C Nov. 25, 2015)

Shaded values exceed NJGWQS.

< = not detected

B (inorganic) = estimated result is between the detection limit and quantification limit

B (organic) = analyte found in associated method blank

ft bgs = feet below ground surface

J = estimated result

NA = not analyzed or not available

R = rejected result

µg/L = micrograms per liter

Table 6B

Summary of Historical and Current Mine Water Results for Benzene, 1,4-dioxane, Chloroethane, Arsenic and Lead: 2004-2015
Ringwood Mines/Landfill Superfund Site

Well ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	1,4-dioxane	Chloroethane	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062)	Dissolved Arsenic (USEPA 7062)
			GWQS ¹	1	0.4**	5	3	5	3	5	3	3
CM SHAFT	CM SHAFT(50)(050712) CM-50 (091214) CM-50 (081415)	50'	5/7/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
			9/12/2014	< 0.21		NA	< 2.6	< 3.8 B	< 2.6	< 1.3	NA	NA
			8/14/2015	<0.2	<0.27	<1	2.3 B	0.39 J	<0.5	<0.2	NA	NA
	CM SHAFT(100)(050712) CM-100(091814) CM SHAFT(100)(081715)	100'	5/7/2012	< 0.22		<1	< 0.97	1.7 B	< 0.97	< 1.7	NA	NA
			9/18/2014	< 0.21		<1	R	2.4 J	R	< 1.3	NA	NA
			8/17/2015	<0.2	0.47J	<1	1.6 J	0.29 J	<0.5	<0.2	NA	NA
	CM SHAFT (160)(050912) CM-160(091814) CM SHAFT(160)(081715)	160'	5/9/2012	< 0.22		<1	< 0.97	< 3.0	< 0.97	< 1.7	NA	NA
			9/18/2014	< 0.21		<1	< 2.6	13.2 J	< 2.6	< 3.0 B	NA	NA
			8/17/2015	<0.2	.054J	<1	1.7 J	7.8	<0.5	<0.2	NA	NA
	CM SHAFT (275)(050912) CM-275(091914) CM-275 (081815)	275'	5/9/2012	< 0.22		<1	< 0.97	< 3.0	< 0.97	< 1.7	NA	NA
			9/19/2014	< 0.21		<1	< 2.6	104	< 2.6	< 3.0 B	NA	NA
			8/18/2015	<0.2	<0.27	<1	3.2 B	91.00	0.54 J	<0.2	NA	NA
PM AIR SHAFT	PM AIR SHAFT-50(042312) PM AIRSHAFT-50(071112) PM AIRSHAFT-50(091614) PM AIRSHAFT-50(042414) PMAIRSHAFT-50(060215) PM AIRSHAFT-50(082115) PM AIRSHAFT-50(121715) PM AIRSHARFT-50(060116)	50'	4/23/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
			7/11/2012	< 0.24		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
			9/16/2014	< 0.21		<1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
			4/24/2014	<0.24		<.5	NA	NA	NA	NA	NA	NA
			6/2/2015	<0.20		<1	NA	NA	NA	NA	NA	NA
			8/21/2015	<0.20	<0.27	<1	< 1.3 B	4.5	<0.5	0.82 J	NA	NA
			12/17/2015	<0.09	<0.053	<1	NA	NA	NA	NA	NA	NA
			6/1/2016	<1	<0.40	<1	NA	NA	NA	NA	NA	NA
	PMPAS-180(080507) PM AIRSHAFT-180 PM AIRSHAFT(180) PMAIR SHAFT-180 PM AIRSHAFT 180 PM AIRSHAFT-180(052411) PM AIR SHAFT-180(042312) PM AIRSHAFT-180(071112) PM AIRSHAFT-180(071112) DUE PMAIRSHAFT-180(091614) PMAIRSHAFT-180(042415) PMAIRSHAFT-180(060315) PM AIRSHAFT 180(081715) PM AIRSHAFT 180(121815) PM AIRSHAFT 180(060116)	180'	5/7/2008	< 0.26		<1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
			9/18/2008	26.4		21.6	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
			7/10/2009	7.4		34.9	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
			10/29/2009	0.60 J		0.39 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
			6/4/2010	< 0.23		<1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
			5/24/2011	2.5	5.3	< 0.92	2.5 B	< 0.92	< 0.94	NA	NA	NA
			4/23/2012	< 0.22		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
			7/11/2012	< 0.24		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
			7/11/2012	< 0.24		<1	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
			9/16/2014	6.6		25.2	< 2.6	13.3	< 2.6	1.5 B	NA	NA
			4/24/2015	2.3		7.9	NA	NA	NA	NA	NA	NA
			6/3/2015	5.4		14	NA	NA	NA	NA	NA	NA
			8/17/2015	4.1	12	14	1.2 J	0.024	<0.5	<0.2	NA	NA
			12/18/2015	7.1	5.76J	33	NA	NA	NA	NA	NA	NA
			6/1/2016	6.4	5	48	NA	NA	NA	NA	NA	NA
	PMPAS-230(080507) PM AIRSHAFT-230 PM AIRSHAFT(230) PMAIR SHAFT-230 PM AIRSHAFT 230 PM AIRSHAFT-230(052411) PM AIR SHAFT-230(042412) M AIR SHAFT-230(042412) DU PM AIRSHAFT-230(071112) PMAIRSHAFT-230(091714) PMAIRSHAFT-230(042415) PMAIRSHAFT-230(060315) PM AIRSHAFT-230(081815) PM AIRSHAFT-230(121815) M AIR SHAFT-230(121815) DU PM AIR SHAFT-230(060116)	230'	5/7/2008	31.8		21.1	< 1.7	6.4	< 1.7	5.4	NA	NA
			9/18/2008	29.1		19	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
			7/10/2009	7.6		34.9	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
			10/29/2009	31.2		21.3	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
			6/4/2010	31.0		15.9	1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
			5/24/2011	33.2		14	< 0.92	2.2 B	< 0.92	1.3 B	NA	NA
			4/24/2012	< 0.22		<1	1.0 B	< 1.7	< 0.97	< 1.7	NA	NA
			4/24/2012	< 0.22		<1	< 0.97	1.9 B	< 0.97	< 1.7	NA	NA
			7/11/2012	28.5		9.6	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
			9/17/2014	32.9		9.7	4.2	3.4 J	4.9	2.2 J	NA	NA
			4/24/2015	7.8		29.1	NA	NA	NA	NA	NA	NA
			6/3/2015	25		8	NA	NA	NA	NA	NA	NA
			8/18/2015	25	140	7.7	3 B	980	0.58 J	<0.2	NA	NA
			12/18/2015	26	31.1	8	NA	NA	NA	NA	NA	NA
			12/18/2015	25	21.8	7.1	NA	NA	NA	NA	NA	NA
			6/1/2016	25	15	23	NA	NA	NA	NA	NA	NA

Notes:

Results for 1,4-dioxane, benzene, lead, and arsenic are presented in this table. See Summary tables for full results.

Results are presented in µg/L unless otherwise noted.

¹ NJGWQS, New Jersey Groundwater Quality Standard NJAC7:9C March 2014

** Interim GWQC (NJAC 7:9C Nov. 25, 2015)

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VALIDATED

TABLE 1
SUMMARY OF SURFACE WATER ANALYTICAL RESULTS:
VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE

Ringwood Mines
Ringwood Borough, Passaic County, New Jersey
(Concentrations reported in ug/L)

PARAMETER				Ace	c-DCE	1,1-DCA	1,2-DCA	1,4-Dcb	Cyc	Cle	Clm	Ben	Clb	Etb	Iso	Tol	Xyl	VC	Total	VOC	1,4-Dio	
NJDEP SURFACE WATER QUALITY STANDARDS (FW2 HUMAN HEALTH)				---	---	---	0.29	550	---	---	---	0.15	210	530	---	1,300	---	0.082	---	---	---	
Well	Lab Sample No.	Sample Matrix	Collection																			
			Date	Time																		
SW-NOD-02	15460-01	Aq	5/20/2016	1025	1.6 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	1.6	6.16 J	<0.0735
SW-PAB-04	15460-02	Aq	5/20/2016	1035	3.5 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	3.5	4.64 J	0.800*
SW-PMB-02	15460-03	Aq	5/20/2016	1245	<1.5	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	ND	4.01 J	<0.0765
SW-PMB-01	15460-04	Aq	5/20/2016	1300	2.9 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	2.9	ND	<0.0798
SW-MRB-03	15460-05	Aq	5/20/2016	1215	2.4 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	2.4	ND	<0.0765
SW-MRB-02	15460-06	Aq	5/20/2016	1230	<1.5	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	ND	ND	<0.0735
SW-01	15460-07	Aq	5/20/2016	1105	3.0 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	3.0	ND	<0.0721
SW-PAB-01A	15460-08	Aq	5/20/2016	1435	2.6 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	2.6	ND	1.41*
SW-03	15460-09	Aq	5/20/2016	1350	<1.5	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	ND	ND	<0.0765
SW-PAB-03	15460-10	Aq	5/20/2016	1420	<1.5	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	ND	ND	0.902*
SW-04	15460-11	Aq	5/20/2016	1330	2.3 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	2.3	1.13 J	<0.0735
SR-3 POND	15460-12	Aq	5/20/2016	930	2.4 J	0.17 J	<0.21	0.17 J	<0.08	<0.27	1.2	<0.09	0.20 J	<0.07	<0.10	<0.11	0.27 J	<0.17	<0.07	4.41	ND	5.01*
SR-3 SEEP1	15460-13	Aq	5/20/2016	935	20	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	0.70 J	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	20.7	ND	0.907*
SR-3 SEEP2	15460-14	Aq	5/20/2016	955	1.8 J	0.53	0.38 J	<0.11	0.11 J	0.33 J	4.6	<0.09	1.3	0.14 J	0.12 J	0.37 J	<0.16	0.55 J	0.21	10.44	ND	6.1*
PMP POND	15460-15	Aq	5/20/2016	1045	2.5 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	2.5	ND	0.189
SW-PAB-01	15460-16	Aq	5/20/2016	1015	<1.5	0.12 J	<0.21	<0.11	<0.08	<0.27	1.4	<0.09	0.37 J	<0.07	<0.10	0.12 J	<0.16	<0.17	<0.07	2.01	ND	1.6*
SW-PAB-00	15460-17	Aq	5/20/2016	1115	1.6 J	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	1.6	ND	<0.0798
FB	15460-18	Aq	5/20/2016	1505	<1.5	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	ND	ND	<0.0721
TB	15460-19	Aq	5/20/2016	---	<1.5	<0.11	<0.21	<0.11	<0.08	<0.27	<0.13	<0.09	<0.09	<0.07	<0.10	<0.11	<0.16	<0.17	<0.07	ND	ND	---

KEY:

ug/L - micrograms per liter

Ace - Acetone

c-DCE - cis-1,2-Dichloroethene

1,1-DCA - 1,1-Dichloroethane

1,2-DCA - 1,2-Dichloroethane

1,4-Dcb - 1,4-Dichlorobenzene

Cyc - Cyclohexane

Cle - Chloroethane

Clm - Chloromethane

Ben - Benzene

Clb - Chlorobenzene

Etb - Ethylbenzene

Iso - Isopropylbenzene

Tol - Toluene

Xyl - Total Xylenes

VC - Vinyl Chloride

VOCs - Volatile Organic Compounds

TICs - Tentatively Identified Compounds

1,4-Dio - 1,4-Dioxane

ND - Not Detected above the Method Detection Limit

NOTES:

J - Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

BOLD and Shaded - Indicates an exceedance of the New Jersey Department of Environmental Protection Surface Water Quality Standards (FW2).

< - Not detected equal to or above the Method Detection Limit.

* - The is no New Jersey Surface Water Quality Standard but exceeds the 0.40 ug/L New Jersey Class IIA Groundwater Quality Standard and is significantly less than the Michigan DEQ Ecological Screening Value of 20,000 ug/L proposed for use by Ford.

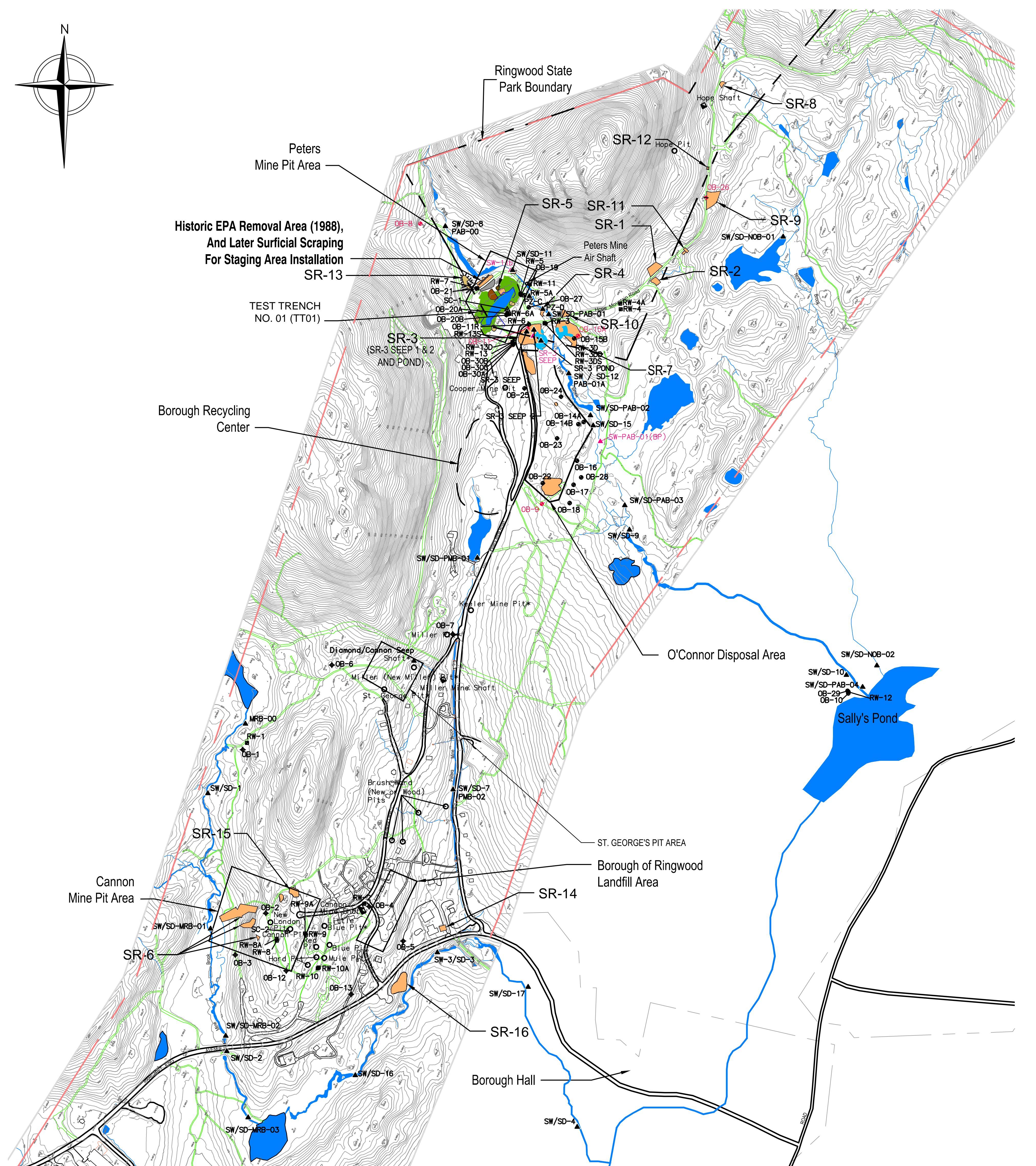
VALIDATED

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS:
VOLATILE ORGANIC COMPOUNDS and 1,4-DIOXANE

Ringwood Mines
 Ringwood Borough, Passaic County, New Jersey
 (Concentrations reported in ug/L)

PARAMETER			Ace	Ben	2-But	CD	Clf	Clb	Cle	Cyh	1,1-DCA	1,2-DCA	c-DCE	1,2-DCB	1,3-DCB	1,4-DCB	Etb	2-Hex	Isp	Mch	MC	MeA	4M	MTBE	1,2,3-TCB	Tol	VC	Xyl	Total VOCs	VOC TICs	1,4-Dio		
NJDEP CLASS II-A GROUNDWATER QUALITY CRITERIA			6,000	1	300	700	70	50	5	---	50	2	70	600	600	75	700	300	700	---	3	7,000	---	70	---	600	1	1,000	---	100/500*	0.4		
Well	Lab Sample No.	Sample Matrix	Collection		Date	Time																											
OB-11R	L1616271-01	Aqueous	5/25/2016	0926	<1.5	2.8	<1.9	<0.09	<0.16	0.07 J	22	2.6 J	0.23 J	<0.11	0.38 J	<0.07	<0.07	<0.08	<0.10	<0.14	0.61	0.56 J	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	0.11 J	<0.17	29.36	8.03	5.41
OB-14A	L1615833-05	Aqueous	5/23/2016	1621	2.1 J	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	<0.21	<0.11	<0.11	<0.07	<0.07	0.12 J	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	2.22	5.55	<0.0872 J
OB-14B	L1615833-04	Aqueous	5/23/2016	1526	2.3 J	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	<0.21	<0.11	<0.11	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	0.21 J	<0.12	<0.16	<0.07	<0.17	2.51	5.88	0.32	
OB-16	L1615833-03	Aqueous	5/23/2016	1306	<1.5	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	<0.21	<0.11	<0.11	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	ND	6.1	<0.0735	
OB-17	L1615833-08	Aqueous	5/24/2016	1156	2.2 J	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	0.73 J	<0.11	<0.11	<0.07	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	2.93	4.15	18.9
OB-18	L1615833-01	Aqueous	5/23/2016	1035	<1.5	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	<0.21	<0.11	<0.11	<0.07	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	ND	9.01	<0.0735
OB-19	L1616271-04	Aqueous	5/25/2016	1336	<1.5	1.5	<1.9	<0.09	<0.16	0.17 J	7.9	0.64 J	0.22 J	<0.11	<0.11	<0.07	0.09 J	0.09 J	<0.10	<0.14	0.48 J	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	11.09	2.19	4.77
OB-20A	L1616271-08	Aqueous	5/26/2016	1046	<1.5	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	0.37 J	<0.21	<0.11	<0.11	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	0.37	3.78	0.175	
OB-20B	L1616271-09	Aqueous	5/26/2016	0936	1.8 J	0.29 J	<1.9	<0.09	<0.16	0.16 J	2.5	1.2 J	0.27 J	<0.11	<0.11	<0.07	<0.07	0.09 J	<0.10	<0.14	0.13 J	0.61 J	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	7.05	3.49	2.00
OB-24	L1615833-06	Aqueous	5/24/2016	0921	2.4 J	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	<0.21	<0.11	<0.11	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	2.4	4.39	<0.0735	
OB-27	L1616271-02	Aqueous	5/25/2016	1036	<1.5	2.4	<1.9	<0.09	<0.16	0.09 J	63	1.9 J	0.22 J	0.12 J	0.31 J	<0.07	<0.07	<0.08	<0.10	<0.14	2.8	1.1 J	0.28 J	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	72.22	37.5	7.32
OB-28	L1615833-02	Aqueous	5/23/2016	1146	<1.5	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	<0.21	<0.11	<0.11	<0.07	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	ND	7.78	<0.0735
OB-31	L1616271-06	Aqueous	5/25/2016	1556	<1.5	<0.09	<1.9	<0.09	<0.16	<0.07	2.8	0.53 J	<0.21	<0.11	0.12 J	<0.07	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	3.45	6.04	1.74
OB-32	L1616271-07	Aqueous	5/25/2016	1701	2.0 J	<0.09	<1.9	<0.09	<0.16	<0.07	0.30 J	0.58 J	<0.21	<0.11	<0.11	<0.07	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	2.88	3.96	0.412
OB-33	L1615833-09	Aqueous	5/24/2016	1541	1.6 J	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	<0.21	<0.11	<0.11	<0.07	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	1.6	4.44	<0.0735
PMP AIRSHAFT-50	L1616487-04	Aqueous	6/1/2016	0931	3.0 J	<0.09	<1.9	<0.09	<0.16	<0.07	<0.13	<0.27	<0.21	<0.11	<0.11	<0.07	<0.07	<0.08	<0.10	<0.14	<0.11	<0.40	<0.27	<0.23	<0.26	<0.15	<0.12	<0.16	<0.07	<0.17	3.0	14.9	<0.0735
PMP AIRSHAFT-180	L1616487-05	Aqueous	6/1/2016	1101	2.8 J	5.6	<1.9	0.12 J	<0.16	0.81	20	1.3 J	0.72 J	<																			

FIGURES
MAY/JUNE 2016 SAMPLING EVENT



NOTES.

- NOTES:**

 1. MAP SOURCE: "SITE PLAN DEPICTING TOPOGRAPHIC FEATURES," RINGWOOD MINES/LANDFILL SITE, SITE RELATED GROUNDWATER REMEDIAL INVESTIGATION REPORT, MAP LATEST REVISION DATE 11/24/14.
 2. EXISTING CONTOURS DEPICT TOPOGRAPHY PRIOR TO REMOVAL ACTIVITIES.

LEGENDA

- | <u>LEGEND</u> | |
|-----------------------|---|
| | BEDROCK WELL |
| | DEEP BEDROCK WELL |
| | DIRECTIONAL WELL |
| | UNCONSOLIDATED WELL |
| | MONITORING WELL DAMAGED OR NOT AVAILABLE FOR SAMPLING |
| | APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS |
| | APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS |
| | APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS |
| | APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL AND PAINT SLUDGE |
| | APPROXIMATE LIMITS OF SURFICIAL SOIL SCRAPING |
| | HISTORICAL FILL AREA SURROUNDING PETERS MINE PIT (AREA 1) |
| | INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS |
| | WATER BODY |
| SW/SD-2 ▲ | SURFACE WATER AND SEDIMENT – SAMPLE LOCATION |
| SW/SD-MRB-01 ▲ | SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM MINE BROOK |
| SW/SD-PMB-01 ▲ | SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PETERS MINE BROOK |
| SW/SD-NOB-01 ▲ | SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM NORTH BROOK |
| SW/SD-PAB-01 ▲ | SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PARK BROOK |
| | TRAIL/ DIRT ROAD |
| | STREAM |
| | INFERRRED STREAM |
| | TOP OF SLOPE TO MINE PIT WITHIN PETERS MINE PIT, ELEVATION 525 FT MSL (1961) |
| | TOP OF BEDROCK PIT WITHIN PETERS MINE PIT |

SCALE: 1"=400'

REV	DATE	DESCRIPTION			DWN BY	DES BY	CHK BY	APP BY
DATE OF ISSUE 11/15		DRAWN BY _____			CHECKED BY _____			

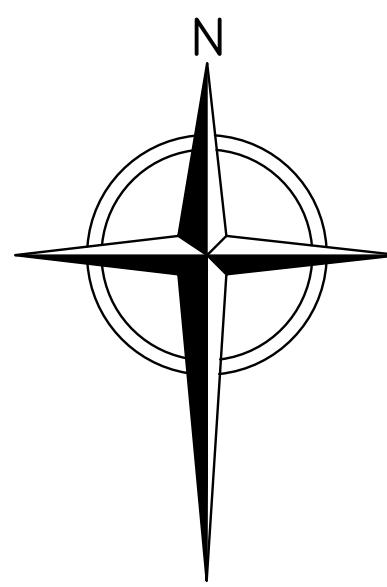


 enviro

**RINGWOOD MINES/LANDFILL SUPERFUND SITE
RINGWOOD, NEW JERSEY**

**MAY - JUNE 2016 GROUNDWATER SURFACE WATER &
MINE WATER SAMPLING REPORT**

SHEET NO. 1
PROJECT NO. 150010



Peters
Mine Pit Area

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
PMP-PAB-00	ND	ND/ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
PMP-POND	ND	ND / 0.189	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SR-3 SEEP-1	ND	0.24J / 0.907	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SR-3 SEEP-2	1.7	5.9 / 6.1	0.67

Borough Recycling Center

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-PMB-01	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-PMB-02	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-PAB-04	ND	0.23J / 0.800	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-SP-01	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-03	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-04	ND	ND / ND	ND

Cannon
Mine Pit Area

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-MRB-02	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-MRB-03	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-MRB-01	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-MRB-02	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-MRB-03	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-MRB-01	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-SD-2	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-SD-16	ND	ND / ND	ND

ID	BENZENE	1,4 DIOXANE	CHLOROETHANE
SW-SD-17	ND	ND / ND	ND

NOTES:

1. MAP SOURCE: "SITE PLAN DEPICTING TOPOGRAPHIC FEATURES," RINGWOOD MINES/LANDFILL SITE, SITE RELATED GROUNDWATER REMEDIAL INVESTIGATION REPORT, MAP LATEST REVISION DATE 11/24/14.
2. SURFACE WATER SAMPLES COLLECTED ON MARCH 23, 2016.
3. THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DOES NOT HAVE A SURFACE WATER QUALITY STANDARD FOR 1,4-DIOXANE.
4. THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION INTERIM SPECIFIC GROUNDWATER QUALITY STANDARD FOR 1,4-DIOXANE IS 0.4 ug/l, EFFECTIVE 11/25/15.

LEGEND:

- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL AND DRUM REMNANTS
- APPROXIMATE LIMITS OF REMOVAL AREA – SOIL, DRUMS, AND DRUM REMNANTS
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- WATER BODY

SW/SD-2 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION

SW/MRB-01▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM MINE BROOK

SW/PMB-01▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PETERS MINE BROOK

SW-NOB-01▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM NORTH BROOK

SW/PAB-01▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PARK BROOK

TRAIL/ DIRT ROAD

STREAM

INFERRED STREAM

TOP OF SLOPE TO MINE PIT WITHIN PETERS MINE PIT, ELEVATION 525 FT MSL (1961)

TOP OF BEDROCK PIT WITHIN PETERS MINE PIT

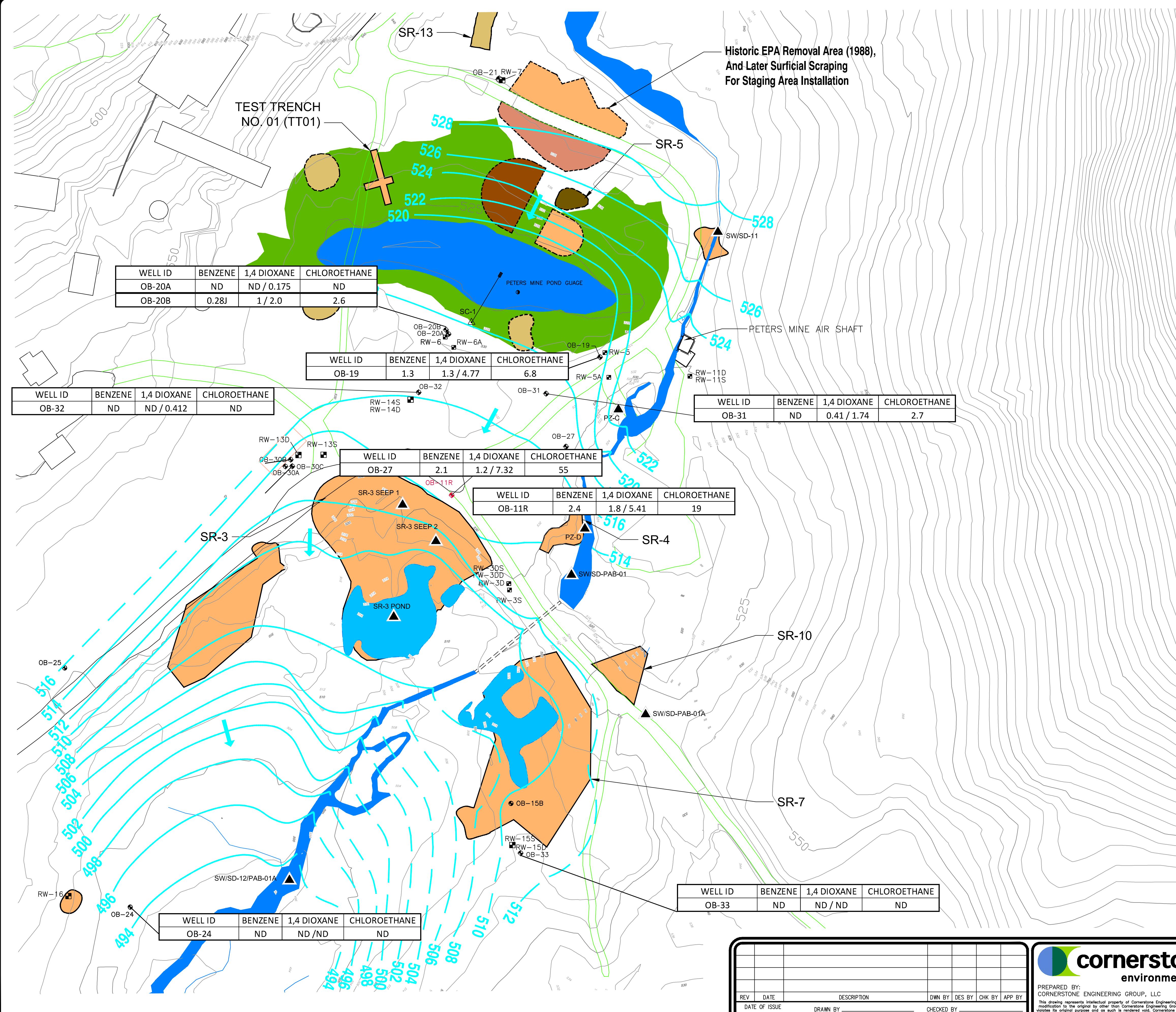
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SCALE: 1"=400'

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
DATE OF ISSUE 11/15						
DRAWN BY DESIGNED BY CHECKED BY APPROVED BY						



RINGWOOD MINES/LANDFILL SUPERFUND SITE
RINGWOOD, NEW JERSEY
MAY – JUNE 2016 GROUNDWATER SURFACE WATER &
MINE WATER SAMPLING REPORT
SURFACE WATER BENZENE, 1,4-DIOXANE AND
CHLOROETHANE CONCENTRATIONS (ug / L)

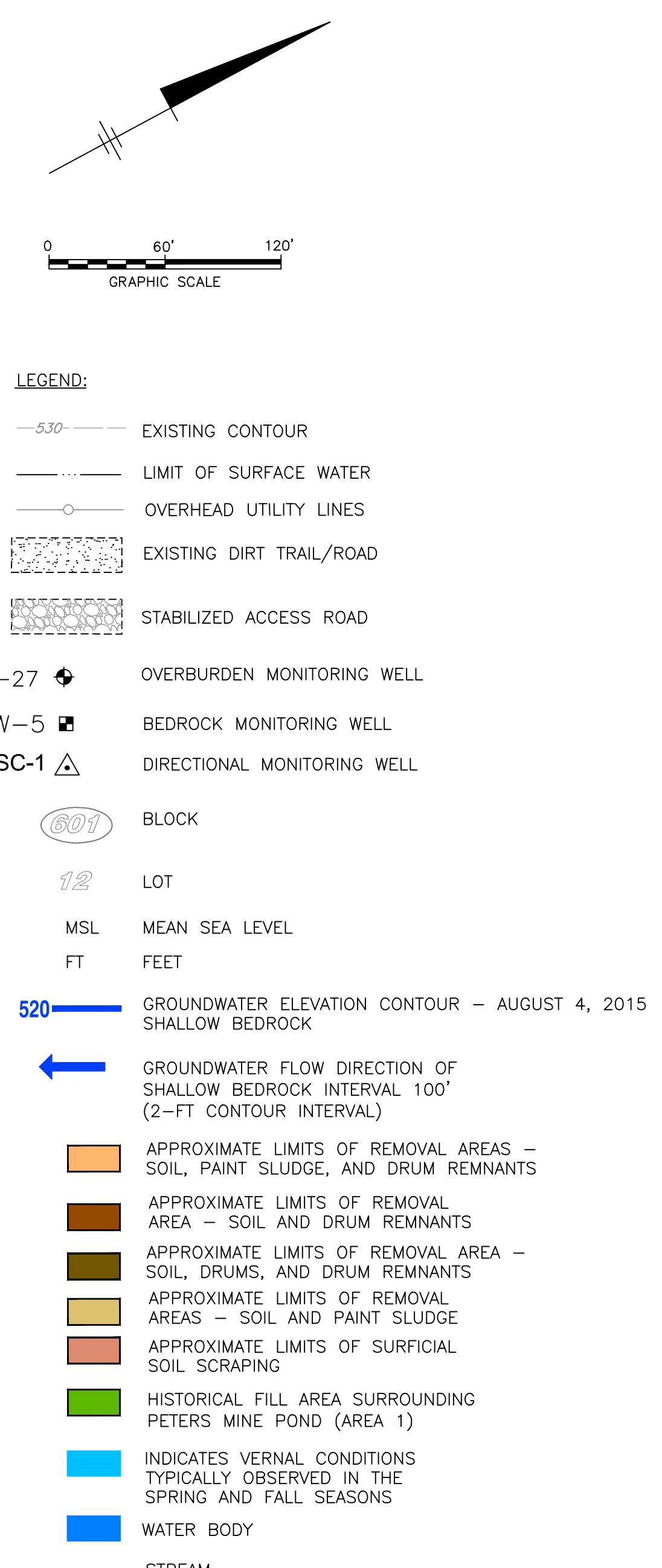
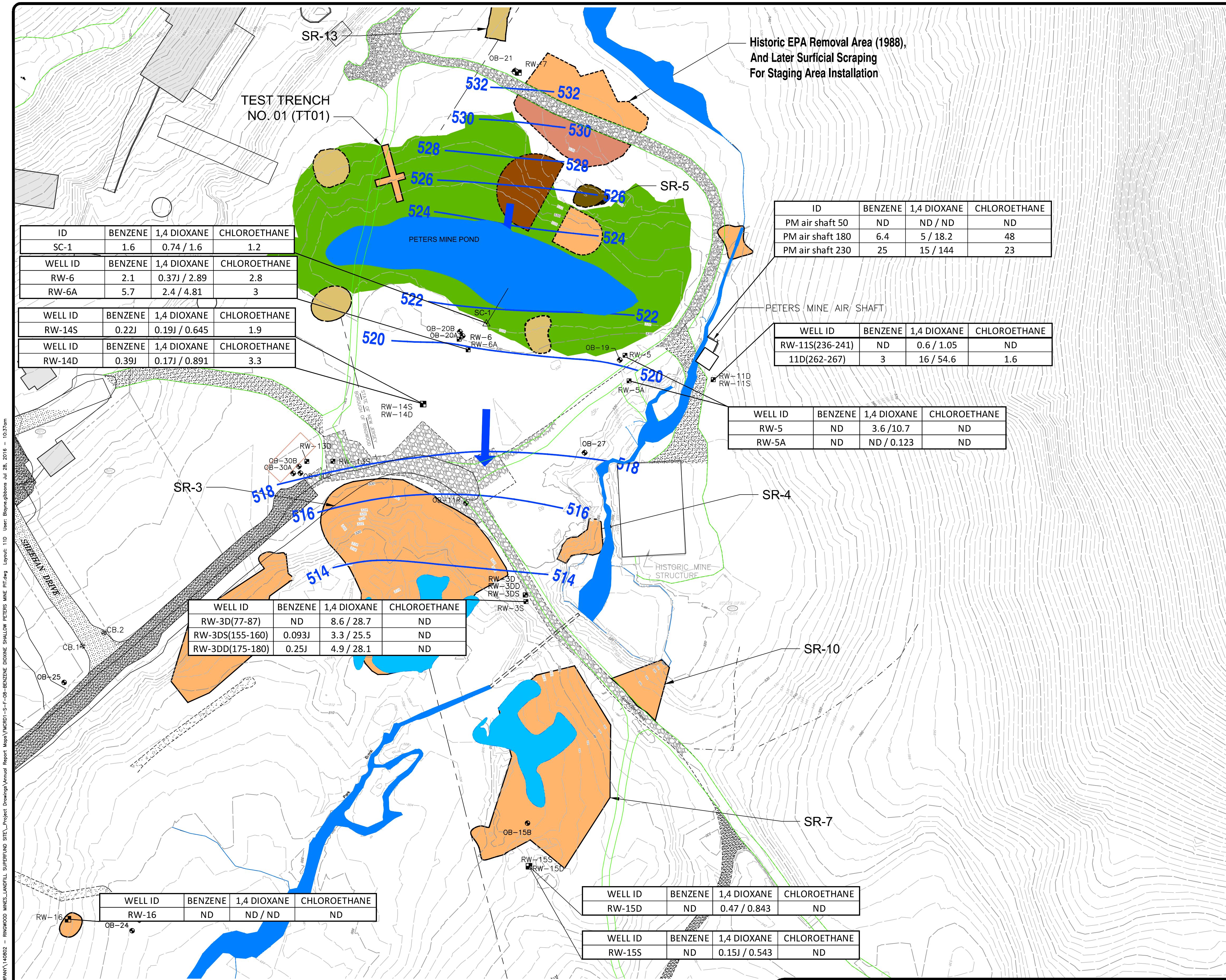
SHEET NO. 2
PROJECT NO. 150648



PREPARED BY:
CORNERSHINE ENGINEERING GROUP, LLC

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	AP
		DATE OF ISSUE _____ DRAWN BY _____ DESIGNED BY _____		CHECKED BY _____ APPROVED BY _____		

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
MAY–JUNE 2016 GROUNDWATER, SURFACE WATER,
AND MINE WATER MONITORING REPORT
**OVERBURDEN BENZENE, 1,4 DIOXANE AND CHLOROETHANE
CONCENTRATIONS (ug / L) IN THE PETERS MINE PIT**



NOTES:

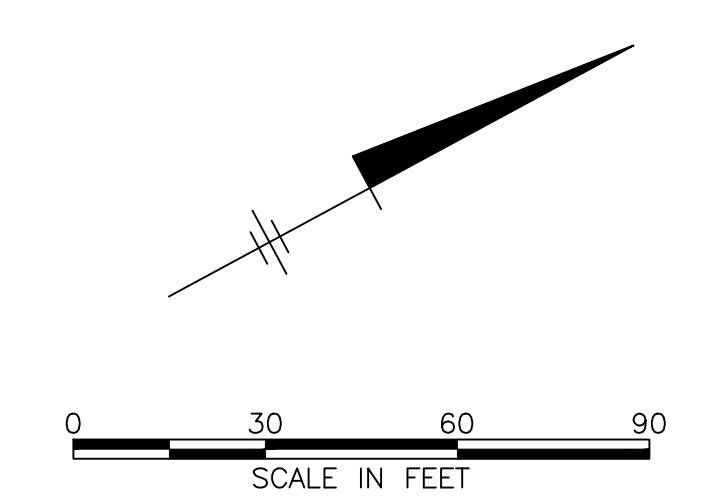
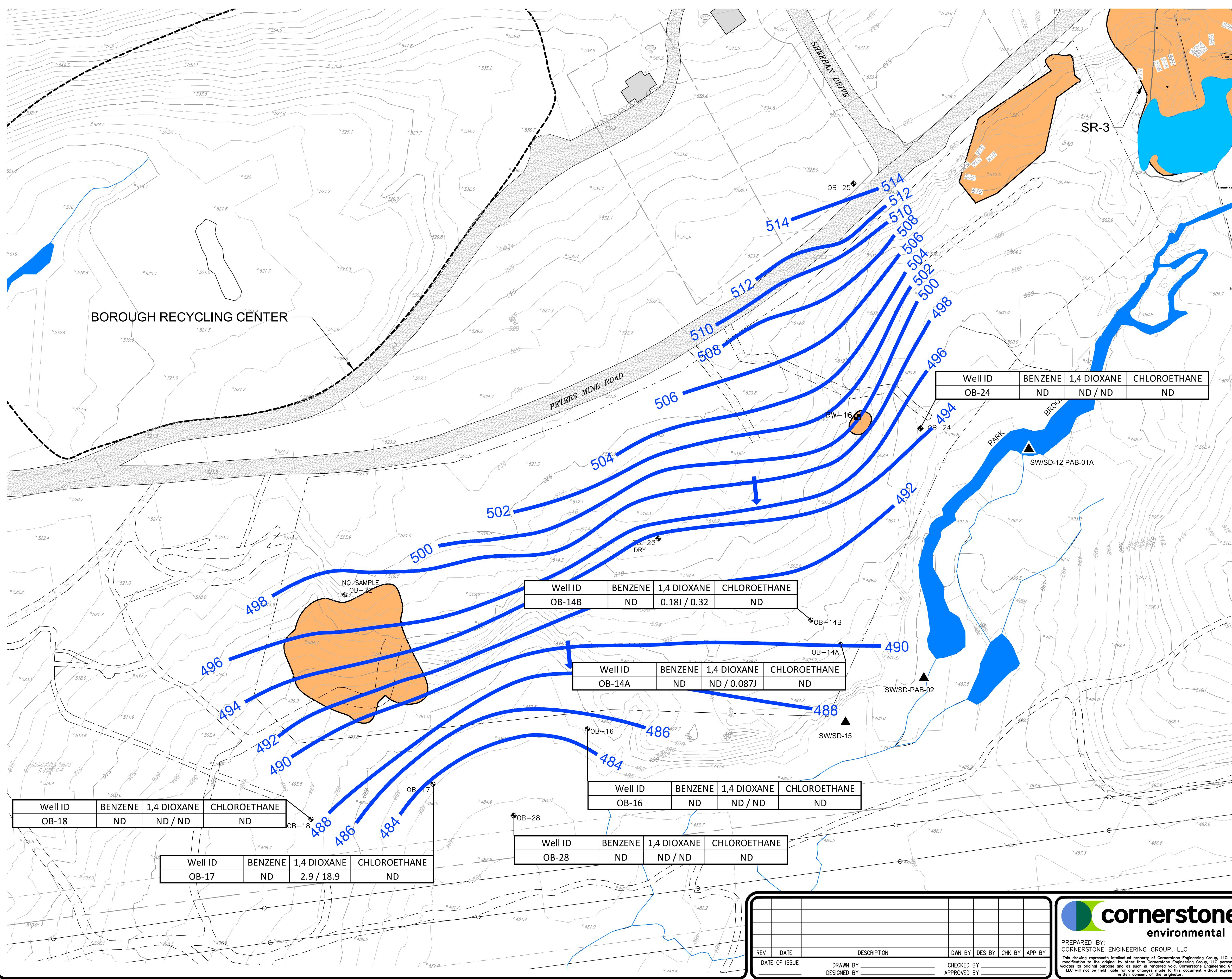
1. BEDROCK CONTOURS BASED ON INTERVAL 75 TO 125 FEET BELOW GROUND SURFACE (405-440 FT MSL).
2. RW-5A AND RW-6A NOT USED TO CONTOUR BEDROCK.
3. RW-3S REPRESENTS THE 77-87 FOOT INTERVAL AND RW-3D IS A MULTIPORT WELL.
4. RW-13S REPRESENTS THE 71-91 FOOT INTERVAL AND RW-13D IS A MULTIPORT WELL.
5. "J" = ESTIMATED VALUE
6. "D" = DILUTION

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
DATE OF ISSUE		DRAINED BY _____	CHECKED BY _____ APPROVED BY _____			
DESIGNED BY _____						

cornerstone
environmental

PREPARED BY
CORNERTONE ENGINEERING GROUP, LLC

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, PASSAIC COUNTY, NEW JERSEY
MAY–JUNE 2016 GROUNDWATER, SURFACE WATER,
AND MINE WATER MONITORING REPORT
BEDROCK GROUNDWATER AND MINE WATER BENZENE, 1,4 DIOXANE AND
CHLOROETHANE CONCENTRATIONS (ug / L) IN THE PETERS MINE PIT



LEGEND:

- 530 EXISTING CONTOUR
- 514 GROUNDWATER CONTOUR LINE RELATIVE AUGUST 4, 2015
- GROUNDWATER FLOW DIRECTION
- LIMIT OF SURFACE WATER
- OVERHEAD UTILITY LINES
- PROPERTY BOUNDARY
- OUTLINE OF O'CONNOR DISPOSAL AREA
- EXISTING DIRT ROAD/TRAIL
- OB-16 ♦ OVERBURDEN MONITORING WELL LOCATION
- OCDA O'CONNOR DISPOSAL AREA
- APPROXIMATE LIMITS OF REMOVAL AREAS – SOIL, PAINT SLUDGE, AND DRUM REMNANTS
- INDICATES VERNAL CONDITIONS TYPICALLY OBSERVED IN THE SPRING AND FALL SEASONS
- WATER BODY
- STREAM

NOTES:

- "J" = ESTIMATED VALUE
- "D" = DILUTION

ATTACHMENT A
MAY/JUNE 2016 SAMPLING EVENT
FIELD DATA SHEETS

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-3(77-87)
Date: 5/27/16 Sampled By: JP
Sampling Time: 14:10 Recorded By: JP
Weather: Sunny / hot / humid / 85F Replicate/Split: Split-EXCEL DUP-3-052716

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE 013626	SoliniST	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system
Casing Diameter:	1'	Screen Interval:	77" to 87"
Total Depth:	87.00	Pump intake depth:	82'
Depth to Water:	13.26		
Water Column:	72.12	Total Volume Purged:	1600 ml
Gallons/Foot:	0.041	Pump on:	14:14 Off: 15:45
Gallons in Well:	0.41	PSI at 50 psi	D/R at 10 sec / 1 min

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: Yes

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 159468 Task: 007 Well ID: RW-3DS(155-160)
Date: 5/27/2016 Sampled By: JP
Sampling Time: 15:05 Recorded By: JP
Weather: sunny / hot / humid / 80F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system	
Casing Diameter:	1"	Screen Interval:	155' to 160'	
Total Depth:	160'	Pump intake depth:	157.5	
Depth to Water:	16.55	Total Volume Purged:	800 ml	
Water Column:	NA	Pump on:	14:50	Off: 15:00
Gallons/Foot:	0.041	PSI at 75 psi	D/R at 15 sec / 1 min	
Gallons in Well:	0.21			

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: slight yellow
Odor: yes

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-3DD(175-180)
Date: 5/31/16 Sampled By: JPL
Sampling Time: 9:47 Recorded By: JPL
Weather: partly sunny / warm / 80F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system
Casing Diameter:	1"	Screen Interval:	175-180
Total Depth:	180'	Pump intake depth:	177.5
Depth to Water:	17.02		
Water Column:	NA	Total Volume Purged:	800 ml
Gallons/Foot:	0.041	Pump on:	9:33 Off: 9:42
Gallons in Well:	0.21	PSI at 85	D/R at 10 sec / 1 min

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	007	Well ID: RW-5
Date:	5/25/16	Sampled By:	JP	
Sampling Time:	14:31	Recorded By:	JP	
Weather:	sunny / hot / 80F	Replicate/Split:	Split-EXCEL	

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Flow flow Bladder pump
Casing Diameter:	2"	Screen Interval:	99' to 119'
Total Depth:	121.85	Pump intake depth:	114
Depth to Water:	12.24		
Water Column:	109.61	Total Volume Purged:	1.06 gallons
Gallons/Foot:	0.160	Pump on:	13:33 Off: 14:35
Gallons in Well:	17.54		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-5A
Date: 5/25/16 Sampled By: JP
Sampling Time: 12:06 Recorded By: JP
Weather: sunny / hot / humid 80F Replicate/Split: Split-EXCEL RW-5A-052515-MS/MSD

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low flow Bladder pump
Casing Diameter:	2"	Screen Interval:	<u>54' to 74'</u>
Total Depth:	75.60	Pump intake depth:	<u>64'</u>
Depth to Water:	12.00		
Water Column:	63.60	Total Volume Purged:	<u>2.11 gallons</u>
Gallons/Foot:	0.160	Pump on:	<u>9:25</u>
Gallons in Well:	10.18		Off: <u>10:45</u>

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-6
Date: 5/26/16 Sampled By: JP
Sampling Time: 11:41 Recorded By: JP
Weather: Sunny / warm / 80F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	99' to 119'
Total Depth:	122.10	Pump intake depth:	109
Depth to Water:	12.90		
Water Column:	109.20	Total Volume Purged:	1.02 gallons
Gallons/Foot:	1.456	Pump on:	11:05 Off: 11:45
Gallons in Well:	17.47		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	007	Well ID: RW-6A
Date:	5/26/16	Sampled By:	JP	
Sampling Time:	12:46	Recorded By:	JP	
Weather:	sunny / hot / humid / 85F	Replicate/Split:	Split-EXCEL	

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	58' to 78'
Total Depth:	80.25	Pump intake depth:	72
Depth to Water:	13.45		
Water Column:	66.80	Total Volume Purged:	1.19 gallons
Gallons/Foot:	0.160	Pump on:	12:00 Off: 12:50
Gallons in Well:	10.69		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	001	Well ID: RW-11S(236-241)
Date:	5/27/16	Sampled By:	JP	
Sampling Time:	9:25	Recorded By:	JP	
Weather:	Sunny/ hot / humid / 80F	Replicate/Split:	Split-EXCEL	

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system
Casing Diameter:	1"	Screen Interval:	<u>236' to 241'</u>
Total Depth:	241.00	Pump intake depth:	<u>238.5</u>
Depth to Water:	9.35		
Water Column:	NA	Total Volume Purged:	<u>800 ml</u>
Gallons/Foot:	0.041	Pump on:	<u>9:04</u>
Gallons in Well:	0.41	PSI at 90' D/R at 10 sec/ 1 min	Off: <u>9:17</u>

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: Slight

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	007	Well ID: RW-11D(262-267)
Date:	5/27/16	Sampled By:	JP	
Sampling Time:	10:09	Recorded By:	JP	
Weather:	Sunny/ hot / humid / 80F	Replicate/Split:	Split-EXCEL	

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system
Casing Diameter:	1"	Screen Interval:	262' to 267'
Total Depth:	267'	Pump intake depth:	262'
Depth to Water:	9.93		
Water Column:	NA	Total Volume Purged:	800 ml
Gallons/Foot:	0.041	Pump on:	9:58
Gallons in Well:	0.41	PSI at 110 D/R at 10 sec/ 1 min	Off: 10:05

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: Slight

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: SC-1
Date: 5/26/16 Sampled By: JP
Sampling Time: 13:41 Recorded By: JP
Weather: Replicate/Split:

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	99' to 109' (angled)
Total Depth:	67.77	Pump intake depth:	
Depth to Water:	14.15		
Water Column:	53.62	Total Volume Purged:	1.11 gallons
Gallons/Foot:	0.160	Pump on:	13:05 Off: 13:45
Gallons in Well:	8.58		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: Peters Mine Shaft-50
Date: 6/1/16 Sampled By: JP
Sampling Time: 9:31 Recorded By: JP
Weather: Sunny / warm /75F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	Low Flow Bladder Pump
Casing Diameter:	2"	Screen Interval:	
Total Depth:	230.00	Pump intake depth:	50
Depth to Water:	8.57		
Water Column:	221.43	Total Volume Purged:	3.17 gallons
Gallons/Foot:	NA	Pump on:	8:50 Off: 9:35
Gallons in Well:	NA		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: Peters Mine Shaft-180
Date: 6/1/16 Sampled By: JP
Sampling Time: 11:01 Recorded By: JP
Weather: Sunny / warm /85F Replicate/Split: Split -EXCEL, Split - ACCUTEST

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	Low Flow Bladder Pump
Casing Diameter:	2"	Screen Interval:	
Total Depth:	230.00	Pump intake depth:	180
Depth to Water:	8.57		
Water Column:	221.43	Total Volume Purged:	3.57 gallons
Gallons/Foot:	NA	Pump on:	10:05
Gallons in Well:	NA	Off:	11:05

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: Peters Mine Shaft-230
Date: 6/1/16 Sampled By: JP
Sampling Time: 12:51 Recorded By: JP
Weather: Sunny / warm /80F Replicate/Split: None

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	Steel	Purge Method:	Low Flow Bladder Pump
Casing Diameter:	2"	Screen Interval:	
Total Depth:	230.00	Pump intake depth:	230
Depth to Water:	8.57		
Water Column:	221.43	Total Volume Purged:	5.94 gallons
Gallons/Foot:	NA	Pump on:	12:15 Off: 12:55
Gallons in Well:	NA		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Effervescent
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-14S(135-153)
Date: 5/31/16 Sampled By: JP
Sampling Time: 12:47 Recorded By: JP
Weather: Sunny/ hot/ humid/ 85F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system
Casing Diameter:	1"	Screen Interval:	<u>135° to 153°</u>
Total Depth:	155.00	Pump intake depth:	<u>135</u>
Depth to Water:	10.99		
Water Column:	NA	Total Volume Purged:	<u>3200 ml</u>
Gallons/Foot:	0.041	Pump on:	<u>11:00</u> Off: <u>12:40</u>
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec / 1 min.	

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-14D (175-185)
Date: 5/31/16 Sampled By: JP
Sampling Time: 13:33 Recorded By: JP
Weather: Sunny/ hot/ humid/ 80F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system		
Casing Diameter:	1"	Screen Interval:	175' to 185'		
Total Depth:	185.00	Pump intake depth:	160		
Depth to Water:	11.02				
Water Column:	NA	Total Volume Purged:	1600 ml		
Gallons/Foot:	0.041	Pump on:	13:17	Off:	13:29
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec/1 min.			

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-15S(110-120)
Date: 5/27/16 Sampled By: JP
Sampling Time: 12:29 Recorded By: JP
Weather: Sunny/ hot/ humid/ 85F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	S52C6LR3

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system
Casing Diameter:	1"	Screen Interval:	110' to 120'
Total Depth:	120.00	Pump intake depth:	110
Depth to Water:	9.46		
Water Column:	NA	Total Volume Purged:	1600 ml
Gallons/Foot:	0.041	Pump on:	12:10 Off: 12:24
Gallons in Well:	0.41	PSI at 70 D/R at 10 sec / 1 min.	

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-15D(127-137)
Date: 5/27/15 Sampled By: JP
Sampling Time: 11:37 Recorded By: JP
Weather: Sunny/ hot/ humid/ 85F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system
Casing Diameter:	1"	Screen Interval:	127" to 137"
Total Depth:	137.00	Pump intake depth:	160
Depth to Water:	2.24		
Water Column:	NA	Total Volume Purged:	1600 ml
Gallons/Foot:	0.041	Pump on:	11:17
Gallons in Well:	0.41	PSI at 70' D/R at 10 sec/1 min.	Off: 11:32

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: RW-16
Date: 5/24/16 Sampled By: JP
Sampling Time: 10:26 Recorded By: JP
Weather: Rain/ cool /65F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	ZIST system
Casing Diameter:	2"	Screen Interval:	52' to 62'
Total Depth:	62.00	Pump intake depth:	58'
Depth to Water:	5.05		
Water Column:	56.95	Total Volume Purged:	1.39 gallons
Gallons/Foot:	0.160	Pump on:	10:30 Off: 11:30
Gallons in Well:	9.11	PSI at 70 D/R at 10 sec/ 1 min.	

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	007	Well ID: OB-11R
Date:	5/25/16	Sampled By:	JP	
Sampling Time:	9:26	Recorded By:	JP	
Weather:	sunny / warm / 75F	Replicate/Split:	Split-EXCEL	DUP-2-052516

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder Pump
Casing Diameter:	2"	Screen Interval:	25' to 40'
Total Depth:	38.55	Pump intake depth:	35'
Depth to Water:	16.34		
Water Column:	22.21	Total Volume Purged:	2.62 gallons
Gallons/Foot:	0.160	Pump on:	8:15 Off: 9:35
Gallons in Well:	3.55		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: slightly cloudy
Odor: slight odor

Purge Water Disposal: Contained
Turbidity(qualitative): slightly cloudy
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-14A
Date: 5/23/16 Sampled By: JP
Sampling Time: 16:21 Recorded By: JP
Weather: sunny / warm / humid / 75F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	<u>Stainless steel</u>	Purge Method:	Low Flow Bladder Pump
Casing Diameter:	<u>4"</u>	Screen Interval:	<u>4' to 14'</u>
Total Depth:	<u>16.00</u>	Pump intake depth:	<u>12'</u>
Depth to Water:	<u>8.96</u>		
Water Column:	<u>7.04</u>	Total Volume Purged:	<u>1.06</u>
Gallons/Foot:	<u>0.650</u>	Pump on:	<u>15:40</u>
Gallons in Well:	<u>4.58</u>		Off: <u>16:25</u>

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-14B
Date: 5/23/16 Sampled By: JP
Sampling Time: 15:26 Recorded By: JP
Weather: sunny / warm / humid / 75F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	<u>Stainless steel</u>	Purge Method:	<u>Low Flow bladder pump</u>
Casing Diameter:	<u>4"</u>	Screen Interval:	<u>25' to 35'</u>
Total Depth:	<u>37.40</u>	Pump intake depth:	<u>30'</u>
Depth to Water:	<u>13.63</u>		
Water Column:	<u>23.77</u>	Total Volume Purged:	<u>1.98 gallons</u>
Gallons/Foot:	<u>0.650</u>	Pump on:	<u>14:40</u> Off: <u>15:30</u>
Gallons in Well:	<u>15.45</u>		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: Yes

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-16
Date: 5/23/16 Sampled By: JP
Sampling Time: 13:06 Recorded By: JP
Weather: Sunny / warm / hot / 75F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	Stainless steel	Purge Method:	Low Flow Bladder pump
Casing Diameter:	4"	Screen Interval:	5' to 15'
Total Depth:	17.95	Pump intake depth:	10'
Depth to Water:	5.71	Total Volume Purged:	1.66 gallons
Water Column:	12.24	Pump on:	12:20
Gallons/Foot:	0.650		Off: 13:05
Gallons in Well:	7.96		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-17
Date: 5/24/16 Sampled By: JP
Sampling Time: 11:56 Recorded By: JP
Weather: rain / mild/ 60F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	<u>Stainless steel</u>	Purge Method:	<u>Low flow Bladder pump</u>
Casing Diameter:	<u>4"</u>	Screen Interval:	<u>3' to 13'</u>
Total Depth:	<u>16.70</u>	Pump intake depth:	<u>12'</u>
Depth to Water:	<u>5.58</u>	Total Volume Purged:	<u>1.85 gallons</u>
Water Column:	<u>11.12</u>	Pump on:	<u>11:05</u>
Gallons/Foot:	<u>0.650</u>		Off: <u>12:00</u>
Gallons in Well:	<u>7.23</u>		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Cloudy to clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-18
Date: 5/23/16 Sampled By: JP
Sampling Time: 10:35 Recorded By: JP
Weather: sunny / hot / humid / 79F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	<u>Stainless steel</u>	Purge Method:	<u>Low Flow Bladder pump</u>
Casing Diameter:	<u>4"</u>	Screen Interval:	<u>10' to 20'</u>
Total Depth:	<u>22.00</u>	Pump intake depth:	<u>18'</u>
Depth to Water:	<u>3.70</u>		
Water Column:	<u>18.30</u>	Total Volume Purged:	<u>1.48 gallons</u>
Gallons/Foot:	<u>0.650</u>	Pump on:	<u>10:02</u> Off: <u>10:39</u>
Gallons in Well:	<u>11.90</u>		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	007	Well ID: OB-19
Date:	5/25/16	Sampled By:	JP	
Sampling Time:	13:36	Recorded By:	JP	
Weather:	sunny / hot / humid / 75F	Replicate/Split:	Split-EXCEL	

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE	Solinist	Horbia U-52	XE9TCBJC

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"		5" to 20"
Total Depth:	21.30		17"
Depth to Water:	11.91		
Water Column:	9.39	Total Volume Purged:	2.02 gallons
Gallons/Foot:	0.160	Pump on:	12:50 Off: 13:40
Gallons in Well:	1.50		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-20A
Date: 5/25/16 Sampled By: JP
Sampling Time: 10:35 Recorded By: JP
Weather: sunny/ hot /81F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	6" to 21"
Total Depth:	20.60	Pump intake depth:	18'
Depth to Water:	14.80	Total Volume Purged:	1.98 gallons
Water Column:	5.80	Pump on:	9:55
Gallons/Foot:	0.160		Off: 10:50
Gallons in Well:	0.93		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-20B
Date: 5/26/16 Sampled By: JP
Sampling Time: 9:36 Recorded By: JP
Weather: sunny /hot / humid 85F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	24' to 34'
Total Depth:	36.00	Pump intake depth:	30'
Depth to Water:	14.50		
Water Column:	21.50	Total Volume Purged:	2.22 gallons
Gallons/Foot:	0.160	Pump on:	8:30 Off: 9:40
Gallons in Well:	3.44		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: none

Purge Water Disposal: Contained
Turbidity(qualitative): Cloudy
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-24
Date: 5/24/16 Sampled By: JP
Sampling Time: 9:21 Recorded By: JP
Weather: rain/mild /65F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	5' to 15'
Total Depth:	18.05	Pump intake depth:	11'
Depth to Water:	4.12	Total Volume Purged:	0.92 gallons
Water Column:	13.93	Pump on:	8:45
Gallons/Foot:	0.160		Off: 9:25
Gallons in Well:	2.23		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear with black particles
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-27
Date: 5/25/16 Sampled By: JP
Sampling Time: 10:36 Recorded By: JP
Weather: sunny / hot / humid / 75F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	24.5' to 39.5'
Total Depth:	40.15	Pump intake depth:	32'
Depth to Water:	14.79		
Water Column:	25.36	Total Volume Purged:	1.66 gallons
Gallons/Foot:	0.160	Pump on:	9:55 Off: 10:40
Gallons in Well:	4.06		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: slight odor

Purge Water Disposal: Contained
Turbidity(qualitative): cloudy
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-28
Date: 5/23/16 Sampled By: JP
Sampling Time: 11:46 Recorded By: JP
Weather: sunny/ hot/ humid/ 75F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	3' to 18'
Total Depth:	18.60	Pump intake depth:	10'
Depth to Water:	1.41		
Water Column:	17.19	Total Volume Purged:	1.98 gallons
Gallons/Foot:	0.160	Pump on:	10:55 Off: 11:50
Gallons in Well:	2.75		

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Cloudy
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-31
Date: 5/25/16 Sampled By: JP
Sampling Time: 15:56 Recorded By: JP
Weather: sunny /hot / humid/ 80F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	23' to 33'
Total Depth:	33.05	Pump intake depth:	29'
Depth to Water:	14.88		
Water Column:	18.17	Total Volume Purged:	2.3 gallons
Gallons/Foot:	0.160	Pump on:	15:00
Gallons in Well:	2.91	Off:	16:00

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Cloudy to clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number: 150648 Task: 007 Well ID: OB-32
Date: 5/25/16 Sampled By: JP
Sampling Time: 17:01 Recorded By: JP
Weather: sunny /hot / humid/ 80F Replicate/Split: Split-EXCEL

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinist	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	10' to 20'
Total Depth:	22.95	Pump intake depth:	20'
Depth to Water:	16.95		
Water Column:	6.00	Total Volume Purged:	2.03
Gallons/Foot:	0.160	Pump on:	14:25
Gallons in Well:	0.96	Off:	17:05

FIELD PARAMETERS

OBSERVATIONS DURING SAMPLING

Well Condition: Good
Color: Clear
Odor: None

Purge Water Disposal: Contained
Turbidity(qualitative): Clear
Other (OVA, HNU,etc.): NA

Cornerstone
Groundwater Sampling Form

Project Number:	150648	Task:	007	Well ID:	OB-33
Date:	5/24/16	Sampled By:	JP		
Sampling Time:	15:41	Recorded By:	JP		
Weather:	partly cloudy / humid/ 78F	Replicate/Split:	Split-EXCEL		

INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE	Solinst	Horbia U-52

PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow Bladder pump
Casing Diameter:	2"	Screen Interval:	66 to 76
Total Depth:	76.30	Pump intake depth:	69
Depth to Water:	8.61		
Water Column:	67.69	Total Volume Purged:	6.97 gallons
Gallons/Foot:	0.160	Pump on:	13:35
Gallons in Well:	10.83		Off: 15:45

FIELD PARAMETERS

Time	Minutes Elapsed	Rate (mL/m)	Gallons Purged	Turbidity (NTUs)	REDOX (mV)	pH (SI Units)	Conductivity (mmhos/cm)	Temp (°C)	Depth to Water	Diss. Oxygen	Comments
13:40	0	220	0.00	1432.0	14.5	6.15	0.098	12.70	9.11	6.01	
13:45	5	220	0.29	1314.00	42.5	6.21	0.095	12.70	9.52	3.37	
13:50	10	220	0.58	1095.00	45.9	6.05	0.096	12.70	9.77	2.91	
13:55	15	220	0.87	1041.00	50.4	6.27	0.095	12.10	10.01	2.90	
14:00	20	220	1.16	858.00	52.7	6.28	0.095	12.30	10.21	2.69	
14:05	25	220	1.45	841.00	53.7	6.28	0.095	12.50	10.40	2.70	
14:10	30	220	1.74	826.00	54.9	6.28	0.095	12.90	10.53	2.61	
14:15	35	220	2.03	779.00	50.7	6.28	0.095	12.90	10.53	2.53	
14:20	40	220	2.32	702.00	50.1	6.29	0.095	12.90	10.53	2.38	
14:25	45	220	2.62	129.00	50.2	6.30	0.094	12.90	10.53	2.51	
14:30	50	220	2.91	131.0	57.7	6.30	0.094	12.9	10.53	2.50	
14:35	55	220	3.20	77.0	47.0	6.30	0.094	12.9	10.53	2.57	
14:40	60	220	3.49	112.0	48.0	6.30	0.094	12.8	10.53	2.69	
14:45	65	220	3.78	109.0	62.2	6.3	0.094	12.2	10.53	2.79	
14:50	70	220	4.07	112.0	67.9	6.3	0.094	11.9	10.53	2.78	
14:55	75	220	4.36	109.0	67.9	6.3	0.094	11.8	10.53	2.78	
15:00	80	220	4.65	107.8	68.1	6.3	0.095	11.8	10.53	2.79	
15:05	85	220	4.94	106.2	67.8	6.31	0.095	11.8	10.53	2.75	
15:10	90	220	5.23	105.4	68.1	6.3	0.095	11.8	10.53	2.76	
15:15	95	220	5.52	107.1	68.3	6.3	0.095	11.9	10.53	2.76	
15:20	100	220	5.81	92.8	68.4	6.3	0.095	11.9	10.53	2.74	
15:25	105	220	6.10	91.7	70.1	6.3	0.094	11.9	10.53	2.76	
15:30	110	220	6.39	88.3	70.3	6.3	0.094	11.9	10.53	2.76	
15:35	115	220	6.68	87.7	71.4	6.3	0.096	11.9	10.53	2.81	
15:40	120	220	6.97	82.2	71.1	6.3	0.095	11.9	10.53	2.82	
15:45	120	220	6.97	82.0	71.5	6.3	0.095	11.9	10.53	2.86	

OBSERVATIONS DURING SAMPLING

Well Condition: Good	Purge Water Disposal: Contained
Color: Clear	Turbidity(qualitative): Cloudy
Odor: None	Other (OVA, HNU,etc.): NA